

MAY 23, 1955

Houston's "Electronic Yard" . . . p. 26

# RAILWAY AGE

One of Five Simmons-Boardman Railway Publications

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Pennsylvania's  
"Truc Train" Cars

Compatible  
Car Reports

P&S Division  
Meeting

Cost-Finding  
Is Risky

Revenue and  
Expense Tables



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2 Nalco H-170B Weed and Grass Control	One gallon per 4500 sq. ft. with one gal. H-170 per 1500 sq. ft.	After predominant grasses emerge. Use in combination with Nalco H-170.	Tank cars.
3 Nalco H-174 Weed and Grass Control	200 to 400 lbs. per acre.	Best applied in early spring or just before rainy season.	100 lb. drums and 3½ lb. shaker boxes.
4 Nalco H-175 Dormant Brush Control	Dilute 10 gal. with 90 gal. diesel oil, etc. Use 25 to 40 gal. per acre.	Thoroughly wet basal area of plant.	54 gal. drums.
5 Nalco H-176 Brush Control	Dilute one gal. to 135 gal. of water. Use 100 to 300 gal. per acre.	Thoroughly wet brush after leaves are out.	Tank cars and 55 gal. drums.
6 Nalco Dalapon (liquid) Weed and Grass Control	Dilute 10 gal. with 90 gal. of water. Apply 100 gal. per acre.	After predominant grasses emerge. Use in combination with Nalco 2, 4-D.	Special 8000 gallon tank cars.
7 Nalco 2, 4-D Alkanolamine Weed Control	Dilute up to 3 gal. with 100 gal. dalapon solution per acre.	After predominant weeds emerge.	Tank cars and 55 gal. drums.
8 Ammate (liquid) Brush Control	Use 100-300 gal. per acre of dilute solution containing ¼ lb. per gal.	Thoroughly wet brush after leaves are out.	Tank cars.
9 Penta and Oil Weed Control	Dilute 30 gal. with 170 gal. water per acre.	After predominant weeds and grasses emerge.	Tank cars.
10 2, 4, 5-T (liquid) Brush Control	Dilute 3 gal. to 135 gal. of water. Use 100-300 gal. per acre.	Thoroughly wet brush after leaves are fully grown.	55 gal. drums.

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May 23, 1955

Vol. 138, No. 21

## Week at a Glance

"It's time for agreed charges," said Arthur E. Baylis, NYC traffic vice-president, in a recent speech in which he explored their probable advantages and knocked down some of the arguments which might be advanced in opposition to them. 7

Substantial savings are anticipated by the New York Central from its program, now well under way, of substituting centralized traffic control for multiple trackage. 8

## FORUM—Cost-finding is risky, but riskier to evade.

It seems inevitable that railroad people must become more expert in the field of cost finding. The ICC's cost-finding methods lack perfection, but the railroads have yet to come up with a better system. 25

Houston's "electronic yard", now in partial operation, will be completed this fall. The four-mile-long facility, "push-button" controlled, is expected to handle some 3,500 cars daily. 26

Compatible car report systems can boost car loadings, reduce investment in rolling stock. Better service is another of the many advantages which can be realized. 29

PRR cars for "TrucTrain" service — 200 of them — were recently completed by Bethlehem Steel. Seventy-five feet long, they're designed primarily for safe, efficient and speedy handling of two highway trailers per car. 31

How to get more for \$1.6 billion was under study last week by purchases and stores officers meeting in Chicago. 33

## BRIEFS

Of the "Weeks Report," the authoritative "Economist" (London) says "the road haulage and shipping

## Current Statistics

Operating revenues, three months	
1955 .....	\$2,298,884,456
1954 .....	2,265,312,671
Operating expenses, three months	
1955 .....	\$1,763,808,781
1954 .....	1,836,579,222
Taxes, three months	
1955 .....	\$ 241,932,325
1954 .....	222,990,391
Net railway operating income, three months	
1955 .....	\$ 232,177,806
1954 .....	145,201,184
Net income, estimated, three months	
1955 .....	\$ 175,000,000
1954 .....	92,000,000
Average price railroad stocks	
May 17, 1955 .....	92.97
May 18, 1954 .....	65.58
Carloadings, revenue freight	
Eighteen weeks, 1955 .....	11,894,774
Eighteen weeks, 1954 .....	11,104,174
Average daily freight car surplus	
Wk. ended May 14, 1955....	13,569
Wk. ended May 15, 1954....	128,146
Average daily freight car shortage	
Wk. ended May 14, 1955....	5,861
Wk. ended May 15, 1954....	348
Freight cars on order	
May 1, 1955 .....	17,930
May 1, 1954 .....	17,817
Freight cars delivered	
Four months, 1955 .....	10,013
Four months, 1954 .....	17,779
Average number railroad employees	
Mid-April 1955 .....	1,009,159
Mid-April 1954 .....	1,052,350

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## Week at a Glance CONTINUED

lobbies are reputedly mobilizing 'half the lawyers in Washington' in order to ensure that the committee's report meets the same fate as have many similar proposals in the past."


**Champion of "rail-bound" shippers** seems to be one role assumed by President Curry of American Trucking Associations as he continues his assault on the report of President Eisenhower's Cabinet Committee on Transport Policy. Mr. Curry has called the committee's rate-freedom recommendations an invitation for the railroads to drive truckers out of business "while building a war chest to do it from rail-bound traffic at the mercy of the highest rates the traffic will bear."

**A new joint piggyback service**, "competitive with all forms of transportation," between California and the Pacific Northwest via the Bieber route will be established May 25 by the Great Northern, the Western Pacific and the Santa Fe.

**Consolidating or coordinating the Milwaukee and the Chicago & North Western** can "very definitely" result in substantial economies, Leo T. Crowley, board chairman of the Milwaukee, said at the May 10 annual meeting. Studies are continuing and a complete, detailed report on all possibilities should be ready "by early fall."

**Revenue of \$70 million annually from lcl freight** is the goal of an intensive campaign by the Pennsylvania to provide the best possible service on that type of traffic. Its achievement would bring lcl revenue to about 10% of the railroad's total gross from freight, and more than double the \$31 million received from lcl last year. Latest innovation in the campaign is use of radio-dispatched pickup and delivery trucks in the Pittsburgh area.

**The Railway Business Association**, meeting in Chicago May 19, voted a largely increased budget and changed its name to the Railway Progress Institute. Liaison with the Federation for Railway Progress was also approved.



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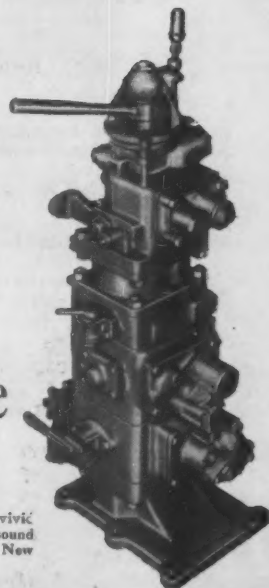
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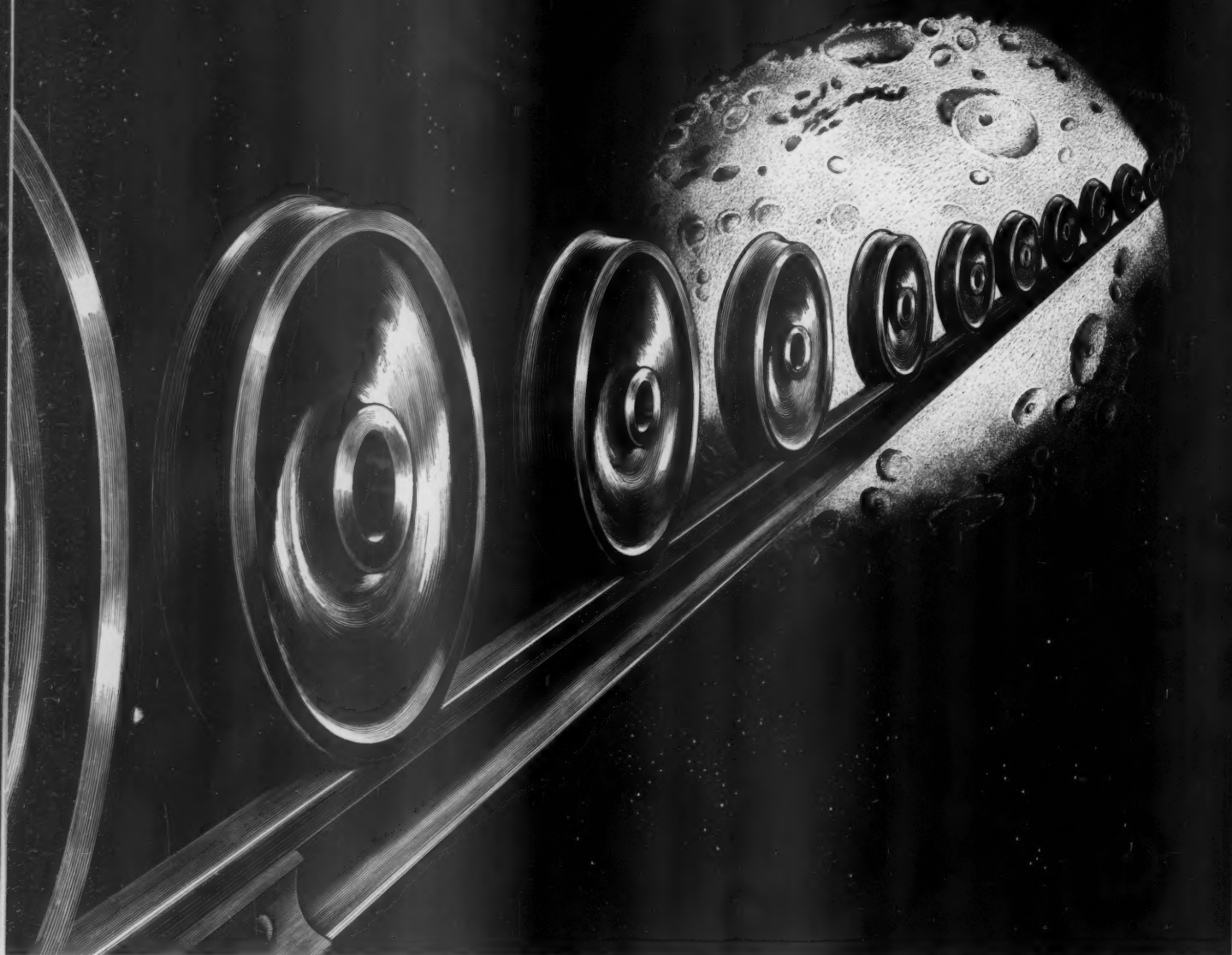
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# "It's Time for 'Agreed Charges'"

"Rewards would be terrific," says Baylis, while warning that "job is not easy" and "problem is complicated"

"Adoption of 'agreed charges' in rail-roading in the United States appears long overdue, and there is no time like the present to start it."

That conclusion was presented by Arthur E. Baylis, vice-president—freight traffic, of the New York Central, to the Michigan Traffic & Transportation Conference at Michigan State College, in a May 12 address which he described as an effort "to stimulate some constructive thinking on this very important question." His talk was based in part on experience which the Central and its associate, the Toronto, Hamilton & Buffalo, have had with agreed charges in Canada; in it, he covered both the "tremendous potential rewards" and the "many pitfalls" surrounding the subject which "is brand new from an experience standpoint in the United States."

**Where Agreed Charges Come In**—Agreed charges "come in," Mr. Baylis said, because "the time has definitely arrived to attempt something more definite in the continuing program to build up carriage of tonnage by rail." He denied that railroads "have been asleep to the facts of life."

or that they "have sat idly by and watched their status change from that of monopoly to one of a highly competitive industry," but conceded that results of their "running fight to maintain and to strengthen their transportation position . . . have been spotty and generally unsuccessful." The many things they have done are "not enough."

**Advantages**—Mr. Baylis described, as follows, the outstanding advantages that might result from use of agreed charges by U. S. rail carriers:

"(1) Of primary importance is the fact that an agreed charge is a *mutual* agreement. Rail carriers agree to do certain things with their charges and simultaneously the customer agrees to do certain mutually advantageous things with his tonnage. Up to now it has been a one-way street, where, in attempts to recover business, rail rates have been cut, cut, and cut again, with no guarantees of traffic recovery. This has brought about the dilemma where on the one hand railroads, in an attempt to keep up with the inflationary spiral, have priced themselves out of many markets on the high-side in their basic rate levels; they have on the other hand priced themselves into the

poor-house through specific reductions without any beneficial recovery of traffic. Agreed charges could well be an important key in solving this dilemma!

"(2) Rail rates have long been regarded as the umbrella for rates quoted by rail competitors. Knowing that a reduced rail rate meant no guarantee of increased tonnage, competitors have been quick to make corresponding reductions to stay under the big, protective umbrella. Agreed charges would at least let the parties to the agreement know where they stood.

"(3) Rail carriers can no longer afford to support disproportionately low rates on inbound raw materials on the assumption they would be the chosen means for transporting higher rated outbound finished products. Today, each commodity and each product must find its own transportation justification. Agreed charges would be helpful to carrier and customer alike in finding the proper transportation program.

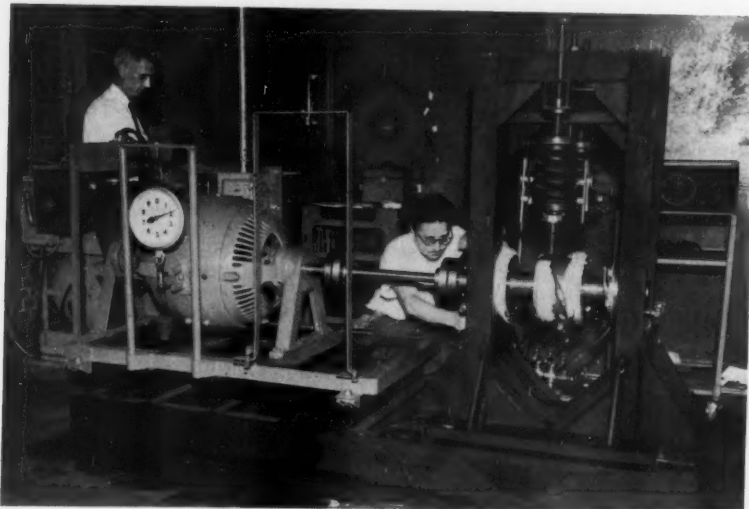
"(4) Through enabling rail carriers to know specifically where they stand tonnage-wise with their customers, they can more efficiently and economically prepare their plants, equipment and services to meet these requirements. No longer would railroads be in the category of 'standby,' 'overflow' or 'emergency' carriers, required to maintain maximum plant capacity to meet all emergencies. Agreed charges would be most helpful in specifically defining the size of their job and in enabling them to handle this job more efficiently and more economically.

"(5) Agreed charges should go a long way in slowing down and restricting chain reaction in rate cutting—the snowballing of reductions. Granted, of course, 'agreed charges' are not exclusive charges, and should be made available to a large number of customers. . . .

"(6) Agreed charges, because they embrace a mutual agreement between carrier and customer, provide a potent weapon against the ever-growing common foes that are fighting all of our common carriers, i.e., contract and private carriers. The growth of these two parasites of regulated transportation is dangerous and appalling from a public transportation policy standpoint. If shippers and receivers knew exactly where they stood, as they would under agreed charges, they would be less likely to seek the theoretical economies dangled in front of them by contract or private carriage.

"(7) Agreed charges administered under a time schedule permitting them to become effective on twenty days' notice, as recommended in the [Canadian] Royal Commission's report, would eliminate the punitive time-lag in regulatory rate making. This alone, through improving the economy of the carriers, should have a beneficial effect on all users of common carrier transportation, whether they ship in single car lots or under an agreed charge contract. . . .

"(8) Agreed Charges will provide a modern, streamlined and mutually responsible way for railroads to go into the wholesale as well as the retail transport-



A SIGNIFICANT REDUCTION in occurrence of hot boxes may result from a \$275,000 research study recently completed by Armour Research Foundation of Illinois Institute of Technology, at Chicago. Here, two foundation engineers operate a special ex-

perimental assembly devised for the hot-box project to study freight car journal bearings. Possible causes of bearing failure due to load, speed, and the condition of the lubrication used were observed during the investigation.

tation business . . . an important opportunity they have not enjoyed since they ceased many years ago to be a monopoly.

**Opposition**—The NYC executive predicted opposition to the principle of agreed charges from three sources:

"(1) Those who are not familiar with what agreed charges mean and how they operate.

"(2) Those who think the railroad industry too large to consider such a method of pricing, or that the Interstate Commerce Act is too restrictive to permit agreed charges.

"(3) Those competing forms of transportation that think they would be competitively hurt if common carriers were to use agreed charges. This opposition is purely a question of whose ox is being gored."

Opposition from "the latter camp," Mr. Baylis said, "is really an argument in favor of our adopting these charges." "Contract carriers by water or by highway," he pointed out, "have a form of agreed charge today."

**Hurdles**—Mr. Baylis conceded that, wholly aside from purely "competitive" opposition, there are hurdles to be overcome in adoption of agreed charges in this country. He listed "a few" of these, and answered each, as follows:

(1) Difficulty of inter-railroad agreement.—"Where there's a will, there's a way, especially when stakes are so great and where success will provide lasting benefits for the entire railroad industry."

(2) Fourth section of the Interstate Commerce Act.—Aside from the possibility of its repeal, as recommended by the so-called "Weeks report," the fourth section, "as now being interpreted, is no permanent stumbling block."

(3) Alleged discrimination against the shipper "who automatically gives railroads 100% of his traffic anyhow."—"That individual is rare. . . . If he can meet the specifications, he, too, may have the same agreements and opportunities. If he cannot . . . ample provision for appeal to the ICC should protect him."

(4) Railroads would not gain if agreed charges were made available to truckers.—"they should apply . . . to all forms of regulated common carrier transportation. Such application should make for stronger transportation systems, weed out parasites and unreasonable rate cutters, and bring pricing of each mode of transportation more nearly in line with its profitable economies of operation."

(5) Agreed charges would not correspond with certain parts of present regulatory law?—"Flexibility" can be provided, "by adding an enabling section," to permit regulated carriers "to go into this business of wholesale pricing."

## ICC Won't Act Summarily On Ex Parte 175 Increases

The Interstate Commerce Commission has rejected the railroads' petition to cancel without further hearing the December 31 expiration date of the Ex Parte 175 freight rate increases.

In a notice and order issued May 11 by Secretary Harold D. McCoy, the commission notified the parties that it will accept written testimony and exhibits under modified procedure. The commission announced its Division 2 will hold a hearing at Washington

September 26 for the purpose of cross-examination of witnesses if the opportunity to cross-examine is requested.

The whole commission would then hear oral argument in the case and set a time for filing of briefs, the date for this step to be determined by the close of the Division 2 hearing.

As reported in *Railway Age*, April 25, page 7, the railroads had asked the ICC to make the Ex Parte 175 rate increases a permanent part of the rate structure. The increases are supposed to expire at year's end. The National Coal Association, later supported by other coal groups, earlier had asked the commission to cancel the increases on bituminous coal or, in the least to conduct separate hearings on the increases as they apply to coal.

**Coal Group Plea Rejected**—The ICC, however, rejected that part of the

coal petition asking special consideration, and announced that all issues raised by the railroads and other petitioners are to be merged.

Numerous replies to the railroad petition—including statements in opposition filed by the Department of Agriculture and the General Services Administration—were filed with the commission.

The commission's order instructed the railroads—and water lines and freight forwarders "if they ask for similar relief"—to file their evidence by June 6. All other parties were given to July 5 to file their testimony, and the railroads, water carriers and freight forwarders were given to August 1 to file rebuttals. Requests to cross-examine any witness must be filed within two weeks after testimony by the witness is filed, the commission ordered.

## New Facilities

### Four Tracks to Two on NYC

Removal of two main tracks, installation of CTC, Buffalo to Cleveland, to "pay off" in six years—Other similar projects under study

Work is to start immediately on a 16-month project to convert, from four main tracks to two, that part of the New York Central's main line between Cleveland and Buffalo, 185 miles.

The \$6-million project will provide more efficient double track, with considerable economies in track and signal maintenance, taxes and operating costs, but with no decrease in capacity, according to an announcement by NYC President Alfred E. Perlman. The new double track will be equipped with centralized traffic control, with signals for train movements in either direction on either track, to make the two tracks capable of handling traffic now carried on four tracks. The CTC control machine will be in the dispatcher's office at Erie, Pa.

For the next nine months construction will be confined to installation and relocation of signals, highspeed crossovers between tracks, switches and passing tracks, and the rewiring of communications lines. Upon completion of the construction phase, the actual conversion will take place section-by-section along the line. As all facilities in each of the 7- to 12-mile sections are completed, that section will be converted, and all train operations on it handled by CTC. Twenty-three such separate section conversions will be made, starting with sections nearest Cleveland and Buffalo and gradually converging on Erie.

Concurrent with the changeover, the Central will conduct an intensive training program for employees in the CTC area to acquaint them with new oper-

ating procedures under the new system. Training classes will be held for train crews, track and signal crews, dispatchers and supervisory personnel for about four months prior to initiation of the new system.

As conversion is completed, the two outside tracks will be removed, except in a few locations where they are to be used as passing tracks. The roadbed, however, will be maintained where possible for use by the Central's maintenance department and its off-track maintenance equipment.

**Six-Year "Payoff"**—The project is expected to pay for itself in approximately six years, through anticipated annual reduction in maintenance costs of approximately \$3,500 per track-mile, and estimated yearly tax savings of from \$400 to \$600 per track-mile. In addition, Central spokesmen point out, a large quantity of 127-lb rail and "about 90%" of the ties in the two tracks to be removed will be made available for use at other points.

**Similar Work Elsewhere**—Elsewhere on the NYC, similar track-removal and CTC-installation projects have recently been completed, are presently in progress or under study, or will be considered in the near future.

Between Syracuse, N.Y., and Wayneport, 66 miles, much of the four-track main line has been, or is being, cut back to three tracks, with two tracks each signalled one way and the third track signalled both ways. Comparable work is under study or under way between Rome and Syracuse, 39 miles,

and between Poughkeepsie and Barrytown, 21 miles. Slated for possible future study are single-tracking, with two-direction CTC signaling, of the double-track Boston & Albany and West Shore lines, between Albany, N.Y., and Boston, Mass., and Weehawken, N.J., respectively.

### Southern to Build \$15-Million Yard at Atlanta

Plans for a new yard, to be built at Atlanta, Ga., at a cost of about \$15 million, were revealed to Southern stockholders at their annual meeting in Richmond, Va., May 17, by the road's president, Harry A. DeButts.

The new yard, Mr. DeButts said, "will be comparable in every respect" to other "ultra-modern retarder yards" recently built by the Southern at Knoxville, Tenn., and Birmingham, Ala., and to its \$14-million Citico yard, "now virtually completed and already in operation," at Chattanooga, Tenn. The Atlanta facility "will be an electronic push-button retarder yard in every respect, with television scanning, radar speed sensing, automatic switching, and analog computers providing overall control."

The Southern president explained that Atlanta is a "hub city" on that railroad, and that the decision to build a new yard there "was made in the interest of expediting movement of freight, making more efficient use of freight cars, and putting the railway in better position to handle peak volumes of either defense or civilian traffic."

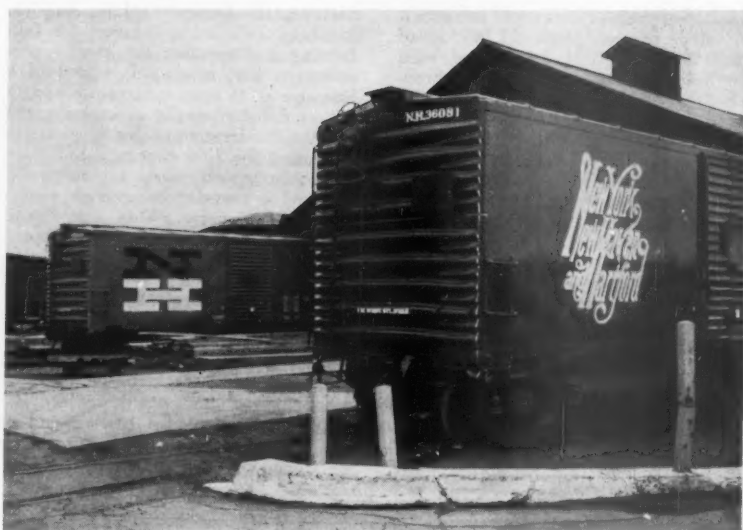
**Electronic Data Processing**—The Southern president also told his company's owners that within 60 days the railroad would receive high-capacity electronic data processing machines, which "are expected to effect economies in operation, make available basic statistical and accounting information heretofore too costly to process, and expedite preparation of those reports and records now being made."

### GN Will Scrap Its 73-mile Mountain Electrification

After a detailed two-year study, the Great Northern has decided to end its electrified operation in the Cascade mountains. The 73-mile electrification covers the GN main line between Wenatchee, Wash., and Skykomish and includes the 7.79-mile Cascade tunnel. All-diesel operation will be substituted after a new ventilating system and automatic tunnel door system are installed.

Substantial savings are expected to result from the move, says John M. Budd, GN president. The change in power will be almost entirely paid for by salvage recovered from electrical installations and equipment now in use—wire and electric locomotives.

Work on de-electrification will begin



THE NEW AND THE OLD in New Haven insignia are shown on these two box cars. The one at the left, just reconditioned at the road's Readville, Mass., freight car shops, bears the new insignia—a block "N" surmounting a

block "H"; the right-hand car carries the old familiar insignia, which gives the full name of the railroad. The new "NH" is being used also on some of the road's locomotives and on its new timetables.

this summer. It will include construction of a 550,000-cfm ventilating system powered by two eight-foot fans at the east portal of the tunnel. Diesel locomotives will be equipped with spray devices to cool their radiators.

The primary problem is the eastward movement of tonnage freight trains upgrade. The ventilating system will not be needed for passenger trains or westbound freight trains. An automatic door at the east portal will close after every train passes through the tunnel to permit replacement of air in the tunnel by the fan system.

**Other Projects**—The tunnel project was one of several major undertakings approved by the board of directors on May 12. Others include: Line changes to reduce curvature near Halford and between Libby, Mont., and Jennings; remodeling of the Great Falls freight station; installation of lcl freight handling equipment there; construction of a paint shed at the Hillyard, Wash., shops; equipping of 50 box cars for automobile transport; installation of automatic block signals between Gunn, Minn., and Cohasset, in the iron ore range; and replacement of certain roadway machinery.

**Canadian National**—The first privately owned building to be constructed in the CNR's Central Station area in Montreal will be a 13-story office building. To be known as the Central Office building, it will be rectangular in shape, 84 by 215 ft. Three stories will be used as car-parking garages and 10 for offices and penthouses. Foundation work has begun and the building is expected to be ready for occupancy by May 1, 1956.

**Grand Trunk Western**—The roundhouse at Milwaukee Junction (near Detroit) is being remodeled and diesel fueling and servicing facilities provided. Diesel fueling facilities also are being provided at the Durand, Mich., roundhouse. Work is just beginning on seven new tracks—a part of the new Torrey Yard extension at Flint.

**International-Great Northern-Gulf Coast Lines**—Improvements at Palestine, Tex., currently total \$626,000. They include construction of a new passenger station and of freight car repair facilities, rehabilitation of diesel locomotive servicing facilities, and a number of yard changes. Near Charenton, La., a bridge over Bayou Teche is being altered at a cost of about \$50,000. Wood trestles are being replaced with reinforced concrete trestles at five separate locations at a total cost of \$361,000.

**Southern Pacific**—Two new track scales are being installed at Tucson, Ariz. (150-ton capacity in 50-ft pit), and at Sacramento, Cal. (200-ton capacity in 70-ft pit). A 90-ton motion weighing scale is being studied for a proposed new retarder yard in the Northwest, and new 150-ton scales in 60-ft pits are being considered for Ashland, Ore., and Klamath Falls; Mina, Nev.; and Spreckles, Cal., Elliot and Mojave.

Although the increased height of the 10 gallery-type suburban coaches now on order from the Budd Company (*Railway Age*, June 21, 1954, page 10) has created no overhead clearance problems, they will necessitate some

additional side clearances on super-elevated curves. Some 13,145 ft of main-line track and 3,890 ft of yard and side tracks between San Francisco and College Park (47 miles south) will be rearranged. The work will include 10 switches and three signals, costing an estimated \$75,000.

Icing facilities at Sparks, Nev., are being extended 1,200 ft at a cost of about \$60,000 by Pacific Fruit Express—jointly owned by the SP and the Union Pacific—to permit handling trains without setovers, thereby cutting terminal time. The SP is rearranging its trackage in connection with the project at an additional cost of \$12,000. Present capacity of the platform is 86 cars.

Supplementing a previous report on the 550-ft Clackamas River bridge relocation near Park Place, Ore. (*Railway Age*, July 12, 1954, page 15),

the Vinnell Company, Los Angeles, has been awarded a contract for fabricating and erecting the steel superstructure. The relocation is part of a line change to reduce curvature and to obtain a better angle of crossing the river. Consideration is being given to extending the line change 2,155 ft to the south, which would replace a 10-deg and a four-deg curve with a one-deg, 30-min curve. This would add some \$85,000 to the \$700,000 project.

**Wheeling & Lake Erie.**—The ICC has authorized this road to construct a 200-ft connecting track between the Massillon branch and Cleveland division of the Nickel Plate near Harmon, Ohio. The new track, to be operated by Nickel Plate, would replace 1.5 miles of track at the eastern end of the Massillon branch, authorized to be abandoned.

Among them, the three air freight lines serve the east coast and trans-continental routes, but the CAB opinion did not specify in which areas they will handle mail. The Post Office now has airlines flying first class mail on the east and west coasts and from the east to Chicago.

## Labor & Wages

### Gurley Attacks Union Shop At Meeting of U.S. Chamber

Santa Fe President Fred G. Gurley, speaking at a general session of the Chamber of Commerce of the United States meeting at Washington, attacked the union shop as "an obvious infringement on the liberty of a man."

Discussing so-called "right-to-work" laws which prohibit compulsory union membership, Mr. Gurley called attention to a case involving the Santa Fe and the non-operating unions now pending before the Supreme Court.

He told the assembled delegates of the chamber that this case presents in an unprecedented way before the high court the issue as to whether compulsory union membership is compatible with the "fundamental liberties guaranteed by the Bill of Rights." State courts have ruled on the question, Mr. Gurley said, but never has it been "squarely presented or decided by the Supreme Court." At issue is a 1951 amendment to the Railway Labor Act sanctioning the union shop under specified conditions.

Mr. Gurley disputed theories supporting the union shop, calling on "the yardstick of ample experience" with railroad unions during the years when the union shop was banned prior to 1951. He noted that by 1952 between 94 and 99% of railroad mileage was covered by collective bargaining contracts, indicating unions had not suffered under open shop conditions.

John J. Hopkins, president of General Dynamics Corporation, which built the atomic submarine Nautilus, spoke at the transportation luncheon. He discussed application of nuclear power to all modes of transport, visualizing great strides in many directions.

Harry A. DeButts, president of the Southern, spoke at another session of the chamber meeting on "Industrial and Trade Area Development," citing experiences of the Southern in the industrial expansion of the South.

**The Southern's president**, recalling that the Industrial Development department of his road was founded in 1894, declared that the road has found by experience that what "helps a community to grow and prosper also benefits us." He said the railroad works with industrial development groups, including such organizations as local chambers of commerce, in cooperative ventures.

## Competitive Transport

### 1954 Brought More Air Line Gains

Their revenue passenger miles were up 13.5% from 1953, while railroad business was down 8.8%

Regularly scheduled domestic air lines in 1954 handled 61.4% of the combined first-class air and rail passenger-miles and 23.1% of the combined coach business. Total revenue passenger-miles of the air lines were up 13.5% from 1953 while railroad passenger business, excluding commutation, was off 8.8%.

The air lines' showing was pointed up by the Bureau of Transport Economics and Statistics of the Interstate

Commerce Commission in the May issue of "Transport Economics," which is the new name of the bureau publication formerly called "Monthly Comment on Transportation Statistics."

Comparative air and railroad figures back through 1946 are shown in the accompanying table. The air figures are confined to the so-called domestic trunk lines and thus do not cover "irregular carriers, territorial carriers, helicopters, feeder or local airlines."

REVENUE PASSENGER-MILES  
(millions)

Year	Rail parlor and sleeping car		Air regular flights*		Coach Air		Percent air of rail and air combined
			Percent air of rail and air combined	Rail excluding commu- tation			
1946	19,801	5,903	23.0	39,039	.....	...	
1947	12,261	6,016	32.9	27,660	.....	...	
1948	11,015	5,840	34.6	24,315	.....	...	
1949	9,349	6,322	40.3	20,273	249	1.2	
1950	9,338	6,710	41.8	17,443	1,056	5.7	
1951	10,226	8,939	46.6	19,524	1,272	6.1	
1952	9,504	9,775	50.7	19,758	2,346	10.6	
1953	7,950	10,580	57.4	18,955	3,717	16.4	
1954	6,850	10,913	61.4	17,689	5,321	23.1	

\* As air coach service began in 1948, the figure for that year includes a small number of air coach passenger-miles.

r Revised.

### Air Freight Lines in on Post Office "Experiment"

The Civil Aeronautics Board has granted authority to three air freight lines to join regular airlines in hauling first class mail. The CAB placed "great weight" on the recommendations of Postmaster General Summerville, who advocated broadening his three-cent-mail-by-air "experiment" to take in freight lines.

The lines granted authority by the

CAB are Slick Airways, the Flying Tiger Line and Riddle Airlines. The authorization does not involve subsidy and the mail will be offered on a space-available basis.

CAB member Chan Gurney dissented from the majority opinion on the basis that there is no need to extend the mail service to the three freight lines, because throughout the course of the two-year-old "experiment" not a single pound of first class mail has been rejected by the regular airlines because of lack of space.

Success of these efforts, he said, is indicated by 353 cases of expansion or new location along the Southern's routes in 1954. The total investment came to a half-billion dollars, Mr. DeButts said, and provided 15,000 new jobs.

**National Chamber Declarations**—During its business session, the National Chamber adopted several new resolutions dealing with transportation, and revised or reaffirmed several adopted in past years.

In a general declaration on the need for maintaining a strong transportation system, the chamber asserted "it is necessary that all forms of transportation, and particularly the essential common carriers, be afforded, under regulation consistently applied, a healthy business atmosphere in which to operate, and competitive opportunities which will conserve for the public good advantages of each; that they be free from government competition; and that each be regulated only to the degree clearly required by the public interest." The emphasis on common carriers and "consistent regulation," are new provisions.

In addition, the chamber revised

its old resolution on competitive rates to read as follows: "Transportation rates on competitive traffic or services should not be prohibited by regulatory bodies because of their effect upon the rates, traffic or competition of another form of transportation, provided such rates are not less than minimum reasonable rates for the type of carrier proposing them."

The chamber voted a new declaration urging more stable federal aid to local airlines, with the provision that government subsidy should not be paid where the cost exceeds the public benefit. It revised its declaration on air line regulation, recommending that non-scheduled air lines be required to show need for their services and be made subject to the same regulations as control the regular lines.

The chamber policy on waterway projects was renewed insofar as it recommends that Congress seek the views of the Interstate Commerce Commission on the economic need for such projects. Added to this, however, is a recommended limitation of the role of the Army Engineer Corps to advice on construction, maintenance and operation.

Company and president of the National Industrial Traffic League, told the Freight Loss & Damage Prevention Section of the Association of American Railroads, meeting at Denver, May 11.

"We hear much about proper preparation of packages for shipment, proper addressing, etc., yet only 7/10 of 1% of the 1954 freight claim bill is assigned to error of employees."

"In talking to railroad switchmen, claim prevention agents and others, and listening at night from my hotel room to the thunderous noise of cars being switched in yards, I cannot help but feel there is much work that can be done only by railroads themselves—in yards and in road haul service after they receive freight—before there will be a material reduction in loss and damage. Let's encourage Chairman Naffziger and the section and insist that railroad management give him authority and monetary support to carry on this claims prevention work," he exclaimed.

**Surplus, But . . .**—"While there is presently a surplus of cars, they are not in first class condition," Mr. Siddons said. "There is a shortage of upgrade work on car equipment. It's growing serious. I think the railroads have been a little penurious in appropriating money for keeping their equipment in good condition."

Mr. Siddons said he was puzzled as to why railroads are "timid" in publishing in tariff form a sufficient allowance for the cost of materials used by a shipper to prepare a car for loading. "Five dollars per box car would be ample, but the allowance seldom exceeds \$1.50," he said. "Since the shipper is preparing a car the railroad furnished for loading, it seems to me the railroad is pennywise and pound-foolish—with cars handled so roughly in transit that lading is frequently damaged—not to give more consideration to furnishing car conditioning materials more freely."

**Payments No Help**—"Mere adjustment of claims for loss and damage does not dismiss or salve over a service failure," said Richard G. May, vice-president, Operations and Maintenance Department, AAR, at the section's opening session.

"We have competition that is quick to exploit or use our failure to advantage. It is little comfort to a receiver to be informed that our loss and damage account has been reduced when we deliver him a load of damaged goods. He neither intends nor desires that the railroad act as a purchaser of his goods at wholesale prices, but figures on making a profit from consumer sales at retail prices. Under these circumstances, he will purchase his transportation where it best serves his overall needs."

Touching on the box car grading problem, Mr. May said: "It is estimated that 60% of commodities loaded in box cars require a Class A or Class B car. Even if total ownership of box cars were maintained on such a proportional basis, we would still have

## Operations

# How a Shipper Would Stop L&D

Prevention is still primarily a carrier problem—To halt it, upgrade car equipment, says Lowe P. Siddons

"Shippers have done about all they can. When you handle cars so loosely that machinery pulls from the floor,

it doesn't do any good to talk about better packaging," Lowe P. Siddons, traffic manager of the Holly Sugar



**MODIFIED LIFT FORK** on a Caterpillar HT 4 Traxcavator makes short work of removing old ties at the Nickel Plate's Madison, Ill., yard. Lift fork was adapted from the standard Caterpillar attachment in the railroad's Bellevue, Ohio, shops. The ma-

chine, as it moves along, removes old ties at the rate of over a half-mile per 8-hr day. As many as 25 ties can be rolled onto the fork, then raised and dumped into a waiting truck. The unit also has been used for removal and loading of rail.

the problem of furnishing cars for higher class loading in areas where releases are predominantly those handling rough freight or merchandise."

**Seminar Success**—Chairman C. A. Naffziger said the section was "much encouraged" by the response of shippers to its first seminar on loading and bracing. The section now plans a second shipper seminar at the AAR Container and Loading Research and Development Laboratory in Chicago, following the 11th such seminar for railroad personnel early in August.

**Hot Boxes Cut**—A new Santa Fe program of inspection of transcontinental freight trains at point of origin has cut down delays en route and reduced hot boxes, G. R. Buchanan, general manager of Santa Fe Western Lines at Amarillo, Tex., revealed. "A detailed inspection is now being made after each train is completely made up. Any defects observed are corrected before the train is permitted to depart. Journal boxes are inspected and oiled. Packing retainer springs are applied to boxes not so equipped. We have found this practice greatly reduces the number of cars set out en route and has reduced the number of hot boxes. This has assisted in avoiding emergency stops and cuts down on delays en route switching out bad order cars. It also has reduced the number of journal failures—a cause of some of our most destructive derailments and a potential source of extensive damage."

**Incentive?**—The Union Pacific, "having tried every known approach to loss and damage prevention with some success, is now studying different kinds of incentive programs that might be applied to men who do the switching," said O. J. Wullstein, its general claims agent.

Other speakers on the one-day program were W. M. Keller, executive vice-chairman and director of research of the AAR's Mechanical Division; E. P. Olson, assistant to operating vice-president of the Frisco; R. C. Johnston, assistant vice-president, operations, of the Canadian National; and Samuel Moss, Jr., acting head of the loss and damage prevention unit of the Navy's Bureau of Supplies and Accounts.

## Erie Speeds Up Chicago-Boston Freight

The Erie and some of its eastern connecting lines have inaugurated a new fast freight schedule which cuts 24 hours from former running time between Chicago and Boston, and provides second morning delivery of freight into New England.

The new Erie train, "Advance 74," departs Hammond, Ind., at 10:30 a.m. (CST), and arrives in Boston at 3:30 a.m. (EST), second morning. The Erie handles New England traffic through connections with the Delaware & Hudson and the Boston & Maine via Binghamton, N.Y., and the New Haven via Maybrook, N.Y.

## Figures of the Week

### Freight Car Loadings

Loadings of revenue freight in the week ended May 14 totaled 757,333 cars, the Association of American Railroads announced on May 19. This was an increase of 16,398 cars, or 2.2%, compared with the previous week; an increase of 79,793 cars, or 11.8%, compared with the corresponding week last year; and a decrease of 22,472 cars, or 2.9%, compared with the equivalent 1953 week.

Loadings of revenue freight for the week ended May 7 totaled 740,935 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS			
For the week ended Saturday, May 7			
District	1955	1954	1953
Eastern .....	129,013	112,214	132,530
Alleghany .....	148,178	116,847	157,198
Pocahontas .....	60,137	46,146	55,045
Southern .....	110,305	116,132	124,204
Northwestern .....	116,239	98,212	125,873
Central Western .....	117,889	105,018	113,123
Southwestern .....	59,174	53,385	57,438
Total Western Districts .....	293,302	256,615	296,434
Total All Roads .....	740,935	647,954	765,411
Commodities:			
Grain and grain products .....	47,460	45,596	39,775
Livestock .....	9,004	7,990	8,609
Coal .....	119,638	98,702	124,312
Coke .....	10,868	7,185	13,773
Forest Products .....	43,951	40,090	40,861
Ore .....	67,439	48,869	85,917
Merchandise l.c.l. .....	60,411	61,658	69,998
Miscellaneous .....	382,164	337,864	382,166
May 7 .....	740,935	647,954	765,411
April 30 .....	730,137	647,925	781,499
April 23 .....	705,848	626,182	779,804
April 16 .....	674,389	612,884	751,628
April 9 .....	663,462	606,790	721,139
Cumulative total, 18 weeks .....	11,894,774	11,104,174	12,823,828

**In Canada.**—Carloadings for the nine-day period ended April 30 totaled 96,650 cars, compared with 70,191 cars for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
April 30, 1955	96,650	39,305
April 30, 1954	95,104	37,591
Cumulative Totals:		
April 30, 1955	1,160,845	533,646
April 30, 1954	1,123,954	488,690

## Equipment & Supplies

### FREIGHT CARS

### 2,750 New Freight Cars Delivered in April

New freight cars delivered in April for domestic use totaled 2,750, compared with 2,833 in March and 4,038 in April 1954, the American Railway Car Institute and the Association of American Railroads have announced jointly.

Orders for 2,706 new freight cars

were placed in April, the announcement added, and the backlog of cars on order and undelivered on May 1 was 17,930, compared with 17,974 on April 1. A breakdown by types of cars ordered and delivered in April, and of cars on order May 1, appears in the following table:

Type	Ordered Apr. '55	Delivered Apr. '55	On Order May 1, '55
Box-Plain .....	1,750	1,304	9,325
Box-Auto .....	.....	.....	200
Flat .....	29	193	1,016
Gondola .....	98	55	1,474
Hopper .....	45	406	789
Covered Hopper .....	125	212	918
Refrigerator .....	.....	447	1,036
Stock .....	.....	.....	300
Tank .....	658	116	2,235
Caboose .....	1	.....	155
Other .....	.....	17	482
TOTAL .....	2,706	2,750	17,930
Car Builders ..	1,189	1,664	7,564
Company Shops ..	1,517	1,086	10,366

### PASSENGER CARS

### Long Island to Buy 90 More Cars from Pullman

Long Island directors have authorized expenditure of \$10,160,000 for a second order of new air-conditioned passenger cars as part of the railroad's \$60,300,000 rehabilitation program. The new order will produce 90 additional cars, which coupled with 127 already on order, will give the railroad a total of 217 new cars—33 more than the 184 it was committed to buy under the redevelopment plan on which it embarked nine months ago.

The second installment of new cars will be built at the Worcester, Mass., plant of the Pullman-Standard Car Manufacturing Company, which began delivery last week of the initial car order. "This will make it possible for us to have all our new cars in service at least six months earlier than we originally had hoped," Thomas M. Goodfellow, LI vice-president and general manager, said. "We will also get more cars for our money, for, although material and labor costs have increased since our first order was placed, Pullman-Standard has agreed to build the second order of cars at the same unit price."

Under the present delivery timetable, the last seven of the 125 first-order cars will be completed by Pullman-Standard the week of November 21 and the first eight of the 90-car second order will be delivered the week of December 5. In addition, there will be two self-propelled Budd cars, one of which already is in service between Babylon and Southampton. "This means the entire new car program will be completed by early April of next year," Mr. Goodfellow pointed out.

The two orders will give the railroad 140 cars for its electrified branches and 77 for non-electrified line, compared with 125 electric cars and 59 non-electrics specified in the plan.

Equipped with eight-ton electro-mechanical air-conditioners, the new cars now being delivered will seat 120 passengers in specially designed re-



**MORE PASSENGER COMFORT** and more passengers in every car come with use of the newly designed Pullman-Standard Day-Nite Duplex coach. Using the basic arrangement of the duplex-roomette sleeper and equipping each space with a pair of leg-rest reclining seats, 56 passengers



can be handled in an 85-ft car. Leg rests fold out of the way when not in use and aisle curtains can be installed for added privacy. For the railroad, the greater capacity can mean less investment and lower maintenance costs per passenger.

versible-back seats. They will have continuous fluorescent lighting, rubber tile floors, overhead parcel racks, coat hooks at seat locations and grab handles on the aisle side of seats.

## LOCOMOTIVES

The **Chesapeake & Ohio** has ordered 40 1,750-hp diesel road-switching units from Electro-Motive Division of General Motors Corporation at a total cost of \$7,500,000. Delivery is scheduled as follows: Six in August, 16 in September and 18 in October.

## Financial

**Canadian Pacific.**—*Additional Control of Wisconsin Central.*—The ICC has authorized this road to increase its holdings in the WC by acquisition of 3,634 shares of WC common stock in addition to 84,840 already owned.

**Chicago & North Western.**—*Proxy Contest.*—The C&NW Stockholders' Committee has served notice that it intends to seek election of a "full slate" of its own directors at the road's 1956 annual meeting.

The warning came from Leo DeMartin, of Collingswood, N.J., spokesman for the committee, after the group had sought to elect only one man at this year's meeting. The committee nominee was Morton Weinress, Chicago investment banker and partner of Weinress & Co.

Outcome of the voting was still not revealed as this issue of *Railway Age* went to press. Six of the 18 C&NW

directors were up for election at the May 17 meeting. The management slate contained two new names—Francis C. Farwell, a partner of Farwell, Chapman & Co., and William J. Montgomery, of Lakewood, Ohio. Aside from the management slate, and Mr. Weinress, the other candidate at the May 17 meeting was Morris K. Siegel of New York City.

The Stockholders' Committee said in its proxy solicitation letter this year that it is "convinced that the value of both the stock and the underlying properties can be increased by a sound program and sound management" and that it would seek to "replace losses with earnings and to produce fair dividends." In addition to Mr. DeMartin, other committee members are Ben Meyers, Miami Beach, Fla., and George R. Joslyn, Chicago.

The May 17 meeting, presided over by Paul E. Feucht, president of the C&NW, was adjourned for two days to allow time for counting stockholder votes. About 125 persons attended the meeting.

**Chicago, Milwaukee, St. Paul & Pacific.**—*To Exchange Debentures for Preferred Stock.*—In a move to reduce federal income taxes by as much as \$1.5 million, directors of this road have authorized, subject to stockholder and ICC approval, the issuance of \$60,000,000 of 5% income debentures to be exchanged for outstanding preferred stock. The offer would provide for exchange of approximately one-half of the preferred shares outstanding on a par-for-par basis.

**Louisville & Nashville.**—*Nashville, Chattanooga & St. Louis Merger.*—The Central of Georgia has been granted the right to intervene before the ICC in proceedings in this case.

The Central informed the commission that it fears present traffic relationships, involving interchanges, through routes and joint rates with the NC&StL will be jeopardized if the merger takes place. It proposed to have "suitable restrictions imposed" to preserve those relationships if the merger is completed and asked the right to intervene to protect its interests.

**Missouri Pacific.**—*Reorganization Chairman Named.*—Isaac B. Grainger, executive vice-president of the Chemical Corn Exchange Bank, of New York, has been approved as chairman of MP reorganization managers by Federal Judge George H. Moore (*Railway Age*, April 18, page 16).

**New York, Ontario & Western.**—*Chicago & North Western Intervenes in Reorganization.*—The C&NW has been admitted as an intervenor in proceedings before the ICC in the proposed reorganization of the NYO&W (*Railway Age*, February 7, page 12). The C&NW, claiming that \$71,542 in traffic and per diem balances is still owed it by the NYO&W, stated that the trustee's plan fails to establish a first priority for distribution of proceeds of the sale of the latter road to creditors.

**Waterloo, Cedar Falls & Northern.**—*Purchase by Illinois Central and Rock Island.*—The ICC has admitted the Chicago Great Western as an intervenor in the proceeding whereby the IC and the Rock Island would acquire joint control of the WCF&N (*Railway Age*, February 14, page 43). The CGW wants to protect its interests relating to joint rates, reciprocal switching rates and transit arrangements.



**NEW-TYPE CONTAINER CAR** recently announced by Shippers' Car Line Corporation (*Railway Age*, May 9, page 13), has 28 aluminum containers with a maximum combined capacity of 100,000 lb of powdered or

granular material. The containers are nested within a steel framework and are held firmly in place by wide bars which fasten across their tops. A workman is shown putting a holding bar in place.

## Abandonments

### Authorizations

**CANADIAN NATIONAL.**—To abandon an 18-mi branch line about 60 mi northwest of Toronto.

**CHICAGO, BURLINGTON & QUINCY.**—To abandon portions of three branch lines in Nebraska as follows: from Lushton to McCool Junction, 7.2 miles; from Hildreth to Holdrege, 17.6 miles; and from Nemaha to Auburn, 9.8 miles.

**NEW HAVEN & DUNBAR.**—To abandon its entire 4.3 mi line at Dunbar, Pa.

**NEW YORK CENTRAL.**—To abandon a 10-mile segment from Newton Falls, N.Y., to Clifton Mines.

**NORFOLK & WESTERN.**—To abandon its 4.9-mile Honaker branch, extending from a connection with its Clinch Valley district at Honaker, Va., to Blackford.

## Organizations

E. N. Hart, personnel supervisor, Jersey Central Lines, and E. J. Haesaert, vice-president, System Federation 103, New York Central, will be co-chairmen of the railroad trades panel meeting at the 11th annual **Eastern Seaboard Apprenticeship Conference** at the Concord Hotel, Kiamesha Lake, N.Y., May 31-June 3. M. S. Riegel, personnel supervisor, mechanical department, New York Central, will act as discussion leader.

The **Metropolitan Maintenance of Way Club** will hold its annual outing June 7, at Wayne Country Club, Preakness, N.J.

The **Railroad Community Rela-**

tions Committee of the Rochester area and the **Transportation Club of the Rochester Chamber of Commerce** will sponsor a special train, June 2, to provide civic leaders and business and professional men an opportunity to go "behind the scenes" to observe the part railroads play in the business and industrial life of Rochester. The train, which will leave the Lehigh Valley freight station at 10:30 a.m., will make a loop over terminal tracks of various railroads in the area.

## Securities

**Chicago, Rock Island & Pacific.**—*Preferred Redemption Completed.*—

A total of 52,056 shares of Series A preferred stock have been exchanged for common stock. The remaining 594,840 shares formerly outstanding have been redeemed at \$105.54 per share. The redemption was handled through issuance of \$62,458,000 of 4¼% debentures (*Railway Age*, March 14, page 83; April 18, page 70; April 25, page 15).

**Covington & Cincinnati.**—*Reduces Interest Rate on Bonds.*—The ICC has authorized this road to reduce from 5% to 1½% the interest rate on \$2,920,000 of its first mortgage gold bonds, due 1992, all of which are owned by the Chesapeake & Ohio. The commission reported that the reduction would result in annual savings of \$102,200.

## Denver & Rio Grande Western.

—*Stock Split.*—The ICC has authorized this road to issue 2,399,710 shares of no par common stock in a three-for-one exchange for 799,903 shares of its \$100 par common stock outstanding (*Railway Age*, April 4, page 54). The ICC also authorized sale to selected road officials and key employees of 150,000 shares of no par common stock under a stock option plan.

## Security Price Averages

	May 17	Prev. Week	Last Year
Average price of 20 representative railway stocks	92.97	96.87	65.58
Average price of 20 representative railway bonds	98.41	98.27	94.89

## Dividends Declared

**CHICAGO, ROCK ISLAND & PACIFIC.**—\$1.25, quarterly, payable June 30 to holders of record June 14.

**DELAWARE & BOUND BROOK.**—50¢, quarterly, payable May 20 to holders of record May 13.

**ERIE & PITTSBURGH.**—87½¢, quarterly, payable June 10 to holders of record May 31.

**GREAT NORTHERN.**—55¢, quarterly, payable June 20 to holders of record May 25.

**GULF, MOBILE & OHIO.**—common, 50¢, quarterly, payable June 13 to holders of record May 24; \$5 preferred, \$1.25, quarterly, payable December 15 to holders of record November 23.

**MINNEAPOLIS & ST. LOUIS.**—35¢, quarterly, payable June 10 to holders of record June 1.

**MISSOURI-KANSAS-TEXAS.**—7% preferred, accumulative, \$1.25, payable July 1 to holders of record June 16.

**NORTH PENNSYLVANIA.**—\$1, quarterly, payable May 25 to holders of record May 18.

**ST. LOUIS-SAN FRANCISCO.**—37½¢, payable June 15 to holders of record June 1.

**UNION PACIFIC.**—non-cumulative, partic. preferred, 25¢, payable June 30 to holders of record June 10.

**VIRGINIAN.**—62½¢, quarterly, payable June 15 to holders of record June 1.

## Applications

**DELAWARE & BOUND BROOK.**—This road has asked the ICC to exempt it from competitive bidding requirements in the extension and sale of \$1,800,000 of first mortgage consolidated bonds. It informed the commission it has not the funds to redeem the bonds on their scheduled date of maturity, August 1, and requested authority to extend this date 15 years. The road proposed either to return the bonds, so extended, to their present holders, or to arrange for purchase of all the bonds by financial institutions for resale.

**MAINE CENTRAL.**—This road has asked the ICC for exemption from competitive bidding requirements in the proposed issuance and sale of \$3,114,500 of first mortgage and collateral 5% bonds. It notified the commission it will ask for authority to issue the bonds in a separate application, and explained they will be used in acquiring the European & North American, which it now operates under lease. The proposed purchase involves exchange of \$500 of the collateral bonds for each four shares of E&NA stock, or \$125 in cash for each share.

**MISSOURI PACIFIC.**—To assume liability for \$2,925,000 of equipment trust certificates to finance in part purchase of 500 box cars and 50 flat cars to be built at MoPac's De Soto shops at an estimated total cost of \$3,681,325. The equipment includes 475 50-ton all steel box cars at an estimated unit cost of \$6,355; 25 50-ton all steel box cars at an estimated unit cost of \$8,390; and 50 50-ton flat cars at an estimated unit cost of \$9,059. The certificates, dated June 15, would mature in 15 annual installments of \$195,000 each. They would be sold at competitive bidding, the interest rate to be determined by such bidding.

**ST. LOUIS-SAN FRANCISCO.**—To issue and sell \$19,500,000 of first mortgage bonds, series B, or to pledge and repledge them as collateral for

short term notes the road may issue. Proceeds from sale of the bonds would be used to replenish in part the road's treasury for capital improvements and dieselization projects it has effected in the past several years. The application advised the ICC that such action would enable the road to proceed with the following projects: Capleville, Tenn., classification yard at an estimated cost of \$9,500,000; enlargement of its yard at West Tulsa, Okla., \$5,500,000; purchase (in part) of 2,000 box cars and passenger equipment \$3,400,000; construction of a new freight house at Memphis, Tenn., \$1,800,000; and establishment of car shops at Springfield, Mo., \$800,000. The bonds, to be dated September 1, would mature September 1, 1995. They would be sold at competitive bidding with interest rate to be determined by such bidding.

## Authorizations

**BALTIMORE & OHIO.**—To assume liability for \$32,000,000 of first mortgage 4% Baltimore & Ohio Chicago Terminal bonds. Proceeds of a contemplated sale of the bonds would be used to retire a like amount of 5% refunding mortgage bonds (*Railway Age*, April 11, page 63). Division 4 reported that the B&O proposes to sell to Halsey, Stuart & Co. the 80,000 shares of \$100-par terminal company stock now pledged under its refunding mortgage for \$2,500,000. Proceeds of this sale would be used to retire an additional \$2,500,000 of refunding mortgage bonds.

**BALTIMORE & OHIO.**—To issue and sell \$35,000,000 of 3½% serial notes, proceeds of which are to be used, with treasury cash, to redeem \$40,000,000 of 4% collateral trust bonds (*Railway Age*, March 28, page 12). Division 4 approved sale of the notes to a group of banks under terms of an ICC authorization exempting this road from competitive bidding requirements in its \$345,000,000 refinancing plan (*Railway Age*, February 21, page 16).

## Supply Trade

**Safety Car Heating & Lighting Co.** has acquired the **Automatic Temperature Control Company**, following a reorganization of the latter, through an exchange of stock between the two companies. ATC will continue operations in Philadelphia as a wholly owned subsidiary of the Safety Company.

The railroad industry sales organization of **Federal Telephone & Radio Co.** has opened branch sales offices in St. Louis and Chicago. **R. P. Un-**

**derwood**, formerly with **Pyle-National Company**, has been appointed district sales manager at St. Louis. **G. T. Graner**, field engineer, is in charge of the Chicago branch. **Robert J. Wylie Company**, of St. Paul, will be responsible for railroad sales in the upper Midwest.

**Roy O. Schiebel**, eastern district and export manager of **Magnaflux Corporation**, has been appointed sales manager, at Chicago, succeeding **Lloyd J. Oye**, resigned. **Robert G. Strother**, western manager at Los Angeles, has succeeded Mr. Schiebel



Roy O. Schiebel

in New York. **Kermit A. Skeie**, Chicago manager, has been transferred to Los Angeles as western region manager. **Denis P. Walsh**, who has been assistant to vice-president, is the new Central region manager at Chicago.

**Charles F. Roselius**, formerly of the mechanical engineer's office of the New York Central, is now with **Ellecon Company** as a mechanical engineer.

**George G. Raymond, Jr.**, executive vice-president and sales manager of **Raymond Corporation**, has been

elected president, succeeding his father, **George G. Raymond, Sr.**, elected chairman of the board.

**Joseph L. White** has resumed practice as a transportation consultant, with particular emphasis on recent developments in electronic data processing, at 177 Lorraine ave., Upper Montclair, N.J.

**H. W. Wreford** has been assigned full charge of Ontario operations of the **International Equipment Company**, with jurisdiction over sales, service and general administration of Toronto and Hamilton branches.

**George H. Garraway**, formerly vice-president of **Orr & Sembauer**, Reading, Pa., has joined **New York Air Brake Company** as assistant to president. **Edward D. Higgins**, formerly with Eclipse Pioneer division of **Bendix Aviation**, also has joined **New York Air Brake** as assistant to director of engineering.

**Graybar Electric Company** has opened a new branch at 206 West 11th st., Lake Charles, La., with **V. P. Flynn**, formerly at Houston, as manager. **B. R. Lind**, district appliance sales manager at Cincinnati, has been appointed branch manager at Madison, Wis.

**American Pulley Company** has purchased assets of **Safeway Industrial Equipment Corporation**, of Chicago, manufacturers of manually and electrically operated hydraulic lift trucks.

The New York district office and warehouse of **Leschen Wire Rope division**, **H. K. Porter Company**, has been moved to 219 Emmet st., Newark, N.J.

**C & D Batteries, Inc.**, Conshohocken, Pa., will begin operations at a new Attica, Ind., plant in June, as part of an expansion program.

**H. D. McLeese** has been appointed general sales manager of **Metal & Thermit Corp.** He has been vice-president and general sales manager of its subsidiary, **United Chromium, Inc.**, and will direct sales of all Metal & Thermit and United Chromium products.

**William C. Runnstrom**, president of **Camef Equipment Corporation**, has been named president of **Carter Blachford Company**, at Chicago. He will continue also as president of the former organization.

**W. R. Maxwell** has been named a representative of **Crerar, Adams & Co.** in the St. Louis area.

## OBITUARY

**Allen L. McNeill**, 75, president of **Industrial & Railroad Supply Co.**, died May 12 at Chicago. (More news on page 35)



**R. C. MAHON** (left), founder and for 43 years president of **R. C. Mahon Company**, has been elected chairman



of the board. **WALTER F. SHEETZ** (right), executive vice-president and sales manager, is now president.

## Questions

## and Answers FOR THE TRANSPORTATION DEPARTMENT

**How can a railroad rate switch engine efficiency?  
Is it practicable to establish reasonably precise standards of work for each crew?**

**Best "work standard"—a good supervisor.**

"We rate yard engine efficiency on the basis of cars handled per engine-hour, using the double count method, and all engine-hours accruing in the terminal or yard.

"This method of rating engine efficiency has recently been revised for test purposes in order to eliminate the variables which affect the average figure. The new count of cars is based on cars forwarded in freight trains and to foreign roads, and yard engine-hours are subdivided to segregate between passenger switching, work train service and freight service. Cars per engine-hour thus reflect the overall efficiency of terminal freight service.

"Even this figure has its limitations, in that there can be tremendous variation between cars handled per engine-hour on leads, in transfer service and in industrial switching. Knowing what to expect as routine performance, the supervisory officers concerned can evaluate the overall figure for freight service in a terminal. Any variation from the normal can be traced to the particular service concerned. This is done by means of a form of yard log in which engine-hours and cars handled on leads, in transfer service and in industrial switching are shown, as well as cars for special handling.

"For comparisons between terminals, the nature of the switching burden at each must be evaluated. The reporting forms therefore make provision for recording the number of switches required. But differences in the number of classifications required, the extent of 'fleeting' of trains, delays due to car inspection, and the distance which cars originating and terminating locally must be moved to and from the yard make comparison difficult.

"There simply is no statistical substitute for a knowledge of the operating routine and requirements at the various terminals.

"While we know that it is possible to switch a given number of cars in a well-designed yard, the establishment of standards for particular yard engine assignments is difficult by reason of the inevitable variations in peak loads from day to day. However, given a reasonable on-time performance of road trains arriving at a terminal, the yardmaster can establish the anticipated yard switching performance for crews under his jurisdiction.

"Considering the day-to-day variables, we have not found it desirable to establish any so-called 'target' for particular shipments.

"The influence of competition makes itself felt in terminal operations in the same way as in road haul, namely, the handling of less cars than the rated capacity of locomotives, under given

weather conditions, would permit. In other words, the equivalent within a terminal of the lightly loaded road train is the special move required to provide service demanded by a patron whose products we desire to retain in road haul. This may mean the ordering of special extra assignments or the removal from switching leads of yard engines. In either event, a reduction in cars handled per engine-hour is the result. This reduction must be accepted whenever the routine of transfer and industrial switching assignments established in accordance with normal train operations must be supplemented because of off-schedule train arrivals. Provision is made for the recording of circumstances such as this in the reporting forms mentioned above."—S. F. Dingle, vice-president—operation, Canadian National.

"At present we do rate switch engine efficiency on the basis of cars handled per engine-hour. This may give a fairly accurate measurement under given conditions. However, these conditions vary from day to day, and cars handled per engine-hour do not as a general thing hold the same relative position as volume of cars handled. This figure of cars handled per engine-hour will in most cases be a yardstick to give a quick indication for an economic survey. However, when making such economic survey, the conditions surrounding the use of the yard engines must be taken into account.

"In the question 'Do you find it practicable to establish reasonably precise standards of work for each crew?', when cars handled per engine-hour are used as a yardstick, they do not mean much, as more often it results in the local officers, as well as yard supervision, failing to do the work that should be done at all times for the best traffic movement. Such shortcomings are covered up by using the cars handled per engine-hour report, and that is one of the big reasons why figures on such a report have to be looked upon in the light of existing conditions. We attempt to change switching from yard to yard as the traffic from time to time will warrant, regardless of what may show up on the cars handled report. We know at our yards and terminals that we must give service regardless of the number of cars handled per engine-hour in order to hold the road haul business.

"Our general manager states, and I agree fully with him, that the best standard of production of a yard crew is a crew working full time, efficiently, under the eye of experienced supervision."—E. L. Morrison, Jr., superintendent freight transportation, C&O.

CONDUCTED BY G. C. RANDALL, district manager, Car Service Division (ret.), Association of American Railroads, this column runs in alternate weekly issues of this paper, and is devoted to authoritative answers to questions on transportation department matters. Questions on subjects concerning other departments will not be considered, unless they have a direct bearing on transportation functions. Readers are invited to submit questions, and, when so inclined, letters agreeing or disagreeing with our answers. Communications should be addressed to Question and Answer Editor, Railway Age, 30 Church Street, New York 7.

# A big step toward a Modern Transportation Policy

*On April 18, the White House released the report of the Presidential Advisory Committee on Transport Policy and Organization calling for a revised national transportation policy. The railroad industry endorses this report as an important contribution toward working out to the best interest of the public the changes in transportation policy which are made necessary by changed competitive conditions.*

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## *In its report, the Advisory Committee finds...*

- That the public interest requires the maintenance of a sound and vigorous common carrier transportation system, adequate for an expanding economy in peace and for the national security in war.
- That, in many respects, present government policy prevents — or severely limits — the most economical use of the nation's transportation plant and imposes large and needless costs upon common carriers and so upon travelers, shippers and the consuming public.
- That common carriers should be permitted greater freedom to utilize their economic capabilities in the competitive pricing of their services, so long as their prices do not exceed reasonable maximum rates or are not less than reasonable minimum rates fixed by the Interstate Commerce Commission.
- That the cornerstone of a modernized regulatory program under a system of dynamic competition is increased reliance on competitive forces in rate making, to enable each form of transport to reflect its abilities by aggressive experimentation in rates and service in order to demonstrate to the full its possibilities for service to the shipping and traveling public.

The report of the Presidential Advisory Committee contains other sound recommendations intended to establish and maintain the "progressive and financially strong system of common carrier transportation" which the committee feels is of "paramount importance to the public interest."

That's why the railroads regard the report of the Presidential Advisory Committee as a distinct step toward greater equality in transportation, with improved service and economy to the public.

*Association of American Railroads*

WASHINGTON, D. C.

# Freight Operating Statistics of Large Steam Railways—Selected Items

Region, Road and Year	Miles of road operated	Locomotive-Miles		Car-Miles		Ton-miles (thousands)		Road-locom. on line							
		Trains	Principal and helper	Loaded (thousands)	Per cent loaded	Gross excl. loco. & tenders	Net rev. and non-rev.	Serviceable		per cent B.O.					
								Unstored	Stored						
New England Region	Boston & Maine.....	1955	1,564	226,205	232,919	9,804	8,694	64.3	573,272	225,783	73	5	6.3		
	1954	1,665	235,753	240,835	8,974	8,920	64.7	586,211	228,479	76	1	5	6.1		
	N. Y., N. H. & Hfd.....	1955	1,746	227,862	257,876	14,850	10,628	67.7	554,646	264,063	83	8	8.8		
	1954	1,748	261,945	261,951	16,065	10,735	66.9	666,821	266,975	85	9	9.6			
	Delaware & Hudson.....	1955	792	171,187	176,556	9,605	8,608	65.5	604,790	304,552	39	3	7.1		
	1954	793	182,090	186,590	9,424	8,587	64.3	605,928	302,028	38	5	5	11.6		
	Del., Lack. & Western.....	1955	962	260,764	272,086	20,849	11,441	66.9	747,401	321,311	64	1	1.5		
	1954	962	245,774	258,620	18,303	10,500	66.2	685,851	288,689	65	5	3.0			
	Erie.....	1955	2,224	497,386	503,626	16,996	28,602	71.7	1,699,226	697,837	159	5	3.0		
	1954	2,224	489,138	492,349	18,635	27,474	69.0	1,676,478	674,712	162	6	3.6			
Great Lakes Region	Grand Trunk Western.....	1955	952	245,255	248,053	2,429	8,377	60.9	597,113	243,484	59	4	14	18.2	
	1954	952	243,930	249,578	2,100	8,219	59.9	588,592	241,967	57	2	18	23.4		
	Lehigh Valley.....	1955	1,142	184,604	187,890	5,465	9,666	66.6	647,953	292,602	32	4	2.9		
	1954	1,150	189,543	192,593	6,061	9,261	65.3	616,169	270,578	29	1	2	5.9		
	New York Central.....	1955	10,661	2,357,296	2,394,025	97,444	93,200	61.0	6,582,622	2,858,152	546	91	118	15.6	
	1954	10,663	2,224,997	2,264,051	86,223	86,837	58.6	6,258,157	2,647,124	629	91	177	19.7		
	New York, Chic. & St. L.....	1955	2,155	665,164	681,599	6,216	26,496	64.4	1,832,012	808,860	138	23	49	23.3	
	1954	2,161	632,630	654,354	6,362	24,563	62.5	1,729,229	707,589	177	37	33	13.4		
	Pitts. & Lake Erie.....	1955	221	55,615	55,955	56	2,316	61.7	203,895	121,412	10	7	1	5.6	
	1954	221	51,012	51,404	2,115	57.1	60.9	189,077	107,696	15	11	7	21.2		
Central Eastern Region	Wabash.....	1955	2,381	489,052	489,901	6,261	21,782	66.1	1,394,494	534,376	103	2	..	..	
	1954	2,381	489,745	491,212	6,366	21,188	65.4	1,376,731	532,476	107	2	..	..		
	Baltimore & Ohio.....	1955	6,077	1,356,305	1,480,316	125,560	53,692	62.9	4,070,610	1,923,410	428	38	111	19.2	
	1954	6,077	1,307,073	1,430,854	121,814	51,868	59.7	3,871,434	1,782,516	423	38	131	20.6		
	Bessemer & Lake Erie.....	1955	208	26,175	26,257	27	846	68.0	84,966	53,219	10	5	..	..	
	1954	209	36,571	37,368	91	1,321	59.6	140,949	84,657	11	4	1	6.3		
	Central RR Co. of New Jersey.....	1955	613	114,942	115,817	5,146	4,291	63.4	326,136	167,377	60	1	7	10.3	
	1954	613	113,966	118,213	8,692	4,345	63.8	328,012	168,155	61	3	8	11.1		
	Chicago & Eastern Ill.....	1955	868	119,719	119,719	2,765	5,286	63.4	372,001	187,249	25	1	3	10.7	
	1954	868	110,651	110,651	2,273	4,516	64.6	316,816	153,257	25	2	2	7.4		
Central Western Region	Elgin, Joliet & Eastern.....	1955	236	73,831	74,014	....	2,472	63.2	198,217	106,760	33	7	3	7.0	
	1954	236	81,799	82,040	....	2,533	62.2	201,953	106,626	34	4	3	7.3		
	Pennsylvania System.....	1955	9,892	2,497,941	2,651,869	188,128	106,449	64.1	7,464,204	3,391,266	716	213	425	31.4	
	1954	9,906	2,417,952	2,589,615	194,191	99,930	61.1	7,216,537	3,182,215	780	342	359	24.2		
	Reading.....	1955	1,304	313,588	316,265	11,191	11,678	60.9	960,703	496,386	155	13	32	16.0	
	1954	1,305	295,302	302,399	10,612	11,405	60.2	908,624	462,320	162	39	17	7.6		
	Western Maryland.....	1955	847	149,458	154,733	8,232	5,635	61.7	475,111	264,147	34	23	3	3.4	
	1954	857	146,469	155,114	9,758	5,377	61.1	449,068	244,979	63	15	11	..		
	Southern Region	Chesapeake & Ohio.....	1955	5,046	1,262,935	1,283,406	38,983	52,368	57.1	4,446,076	2,439,126	360	44	198	32.9
		1954	5,023	1,095,933	1,117,163	28,337	44,201	57.1	3,643,294	1,954,942	349	105	152	25.1	
Norfolk & Western.....		1955	2,110	613,783	661,133	57,947	29,024	59.2	2,675,723	1,454,845	210	27	28	10.6	
1954		2,113	543,298	571,060	38,044	23,929	58.7	2,105,783	1,107,012	209	44	22	8.0		
Atlantic Coast Line.....		1955	5,334	803,512	803,512	8,730	25,235	56.8	1,870,271	809,898	238	1	4	1.7	
1954		5,354	756,595	756,595	9,487	24,996	56.8	1,854,292	797,059	239	5	6	2.4		
Central of Georgia.....		1955	1,731	176,779	176,803	2,102	7,445	68.6	506,008	242,412	74	1	1	1.3	
1954		1,731	182,440	182,464	2,387	6,924	67.1	471,871	220,724	74	2	2	2.9		
Gulf, Mobile & Ohio.....		1955	2,717	252,122	252,122	261	14,845	70.2	979,305	469,331	84	5	2	5.6	
1954		2,718	274,208	274,208	171	14,993	65.4	1,036,670	476,335	85	5	4	4.5		
Southern Western Region	Illinois Central.....	1955	6,539	1,223,205	1,225,009	40,181	47,764	61.9	3,502,860	1,612,441	458	83	172	24.1	
	1954	6,537	1,232,354	1,233,623	41,868	45,253	61.9	3,246,972	1,454,402	501	53	86	13.4		
	Louisville & Nashville.....	1955	4,715	801,040	808,569	15,977	31,329	62.0	2,351,979	1,186,049	169	45	16	7.0	
	1954	4,722	816,210	814,422	16,896	28,736	61.1	2,152,651	1,060,666	226	62	56	16.3		
	Nash., Chatt. & St. Louis.....	1955	1,043	162,391	166,327	4,120	5,498	70.4	356,261	166,032	47	5	6	11.3	
	1954	1,032	170,031	174,718	4,142	5,698	65.4	390,982	179,158	48	5	9	9.4		
	Seaboard Air Line.....	1955	4,053	591,653	591,653	2,314	24,330	62.4	1,746,702	775,018	138	1	9	6.1	
	1954	4,067	602,400	602,400	1,959	24,096	60.9	1,754,972	758,912	143	3	6	4.0		
	Northwestern Region	Southern.....	1955	6,264	862,251	862,311	11,962	39,889	66.4	2,604,058	1,170,921	278	2	..	..
		1954	6,262	873,268	873,308	10,420	37,048	65.2	2,445,366	1,085,548	257	6	2	.8	
Chicago & North Western.....		1955	7,848	644,764	646,509	8,527	28,238	69.8	1,816,666	861,259	131	34	39	19.1	
1954		7,850	624,332	626,118	10,114	25,990	63.7	1,799,796	805,690	174	39	91	29.9		
Chicago Great Western.....		1955	1,437	122,083	122,083	193	7,171	69.8	471,212	214,609	30	3	1	9.1	
1954		1,437	122,213	122,213	141	7,128	68.4	469,678	208,964	32	63	1	9.4		
Chic., Milw. & St. P. & Pac.....		1955	10,633	908,641	921,718	18,804	38,074	60.0	2,589,080	1,145,991	276	63	21	5.8	
1954		10,631	907,797	926,462	25,189	38,225	63.5	2,622,454	1,150,333	319	85	52	11.4		
Chic., St. P., Minn. & Omaha.....		1955	1,606	158,255	159,669	4,758	5,243	66.6	360,581	159,608	57	6	13	18.6	
1954		1,606	160,431	161,961	5,190	5,052	61.7	365,976	157,268	59	6	18	21.7		
Central Western Region	Duluth, Missabe & Iron Range.....	1955	569	28,585	28,647	533	523	56.5	39,896	19,229	25	31	12	17.6	
	1954	569	32,085	32,329	524	528	53.5	40,221	19,363	29	29	30	34.1		
	Great Northern.....	1955	8,288	1,001,414	1,006,786	27,619	35,745	67.7	2,501,601	1,149,045	222	170	40	9.3	
	1954	8,293	1,001,200	1,005,969	32,162	36,939	62.9	2,695,050	1,208,893	262	173	47	9.8		
	Minneapolis, St. P. & S. Ste. M.....	1955	4,171	347,435	348,976	1,752	11,461	70.3	741,105	342,661	87	10	24	19.8	
	1954	4,169	344,068	346,456	5,122	10,890	66.4	709,697	324,845	96	6	18	15.0		
	Northern Pacific.....	1955	6,570	790,930	809,697	23,737	30,792	66.7	2,106,141	938,668	273	23	66	18.2	
	1954	6,570	717,353	736,346	25,107	28,712	69.1	1,888,968	860,666	304	52	62	14.8		
	Southwestern Region	Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.).....	1955	13,098	2,062,980	2,152,714	46,854	96,529	65.1	6,510,363	2,536,524	506	89	35	5.6
		1954	13,070	1,935,040	1,979,025	44,613	86,520	65.8	5,765,651	2,272,607	511	166	36	5.0	
Chic., Burl. & Quincy.....		1955	8,824	1,056,460	1,054,345	35,618	43,366	67.9	2,028,374	1,260,024	252	47	43	12.6	
1954		8,832	1,009,198	1,009,490	30,566	42,880	67.7	2,016,452	1,250,936	263	71	34	12.6		
Chic., Rock I. & Pac.....		1955	7,907	819,839	815,845	1,325	33,544	66.5	2,321,117	966,969	167	1	8	4.6	
1954		7,861	841,340	841,893	2,766	33,095	59.7	2,406,594	960,546	172	1	10	5.5		
Denver & R. G. Wn.....		1955	2,16												

# For the Month of February 1955 Compared with February 1954

Region, Road and Year	Freight cars on line			Per Cent B.O.	G.t.m. per train-hr.		Net ton-mi. per car-mile	Net ton-mi. per car-day	Car-miles per car-day	Net daily ton-mi. per road-mile	Train-miles per train-hour	Miles per loc. per day
	Home	Foreign	Total		incl. locos and tenders	excl. locos and tenders						
<b>New England Region</b>												
Boston & Maine.....	1955	2,572	8,109	10,681	5.1	39,065	2,539	1,000	26.0	46.1	15,156	15.4
	1954	2,802	7,241	10,043	3.4	41,268	2,493	972	25.6	803	4,901	16.6
N. Y., N. H. & Htd.....	1955	2,798	15,372	18,170	2.1	43,086	2,539	1,024	24.8	552	5,401	17.0
	1954	2,951	13,092	16,043	2.7	43,362	2,546	1,019	24.9	589	5,455	17.0
<b>Great Lakes Region</b>												
Delaware & Hudson.....	1955	6,629	4,163	10,792	7.2	64,305	3,550	1,788	35.4	991	42.8	13,733
	1954	7,451	4,492	11,943	4.4	62,564	3,345	1,668	35.2	953	41.7	13,602
Del., Lack. & Western.....	1955	7,600	9,889	17,489	3.7	51,842	2,905	1,249	28.1	657	35.0	11,929
	1954	8,491	8,089	16,580	4.3	50,661	2,831	1,192	27.5	617	33.9	10,718
Erie.....	1955	10,254	15,730	25,984	5.5	66,431	3,446	1,415	24.4	959	54.8	11,206
	1954	12,848	13,394	26,242	5.4	64,644	3,453	1,390	24.6	939	55.4	10,835
Grand Trunk Western.....	1955	3,524	8,998	12,522	6.6	51,118	2,454	1,001	29.1	694	39.2	9,134
	1954	3,867	8,183	12,050	4.6	51,370	2,425	997	29.4	707	40.4	9,077
Lehigh Valley.....	1955	9,843	6,934	16,777	3.7	69,396	3,524	1,592	30.3	625	31.1	9,151
	1954	9,033	6,864	15,897	5.9	67,890	3,271	1,436	29.2	605	31.7	8,403
New York Central.....	1955	74,192	80,626	154,818	7.9	49,379	2,830	1,229	30.7	664	35.5	9,575
	1954	86,440	77,539	163,979	8.5	49,862	2,854	1,207	30.5	572	32.0	8,866
New York, Chic. & St. L.....	1955	8,177	14,401	22,578	9.1	49,396	2,806	1,239	30.5	1,260	64.1	13,405
	1954	10,299	12,849	23,148	6.4	51,454	2,766	1,132	28.8	1,064	59.1	11,694
Pitts. & Lake Erie.....	1955	9,898	5,225	15,123	10.6	54,929	3,689	2,197	32.4	285	88	19,621
	1954	6,768	5,901	12,669	6.6	57,002	3,715	2,116	50.9	277	9.5	17,404
Wabash.....	1955	8,469	10,206	18,675	7.4	64,050	2,865	1,098	24.5	1,002	61.8	8,015
	1954	9,536	9,717	19,253	8.5	66,336	2,824	1,092	25.1	963	58.6	7,987
<b>Central Eastern Region</b>												
Baltimore & Ohio.....	1955	56,404	39,370	95,774	15.5	47,293	3,040	1,436	35.8	719	31.9	11,304
	1954	55,615	33,633	89,248	7.2	47,059	2,934	1,378	34.4	692	33.8	10,476
Bessemer & Lake Erie.....	1955	7,208	825	8,033	17.3	45,977	3,462	2,168	62.9	250	5.9	9,138
	1954	9,027	474	9,501	8.2	62,394	4,020	2,415	64.1	334	8.7	14,466
Central RR Co. of New Jersey.....	1955	5,581	8,933	14,514	11.7	41,530	2,957	1,518	39.0	408	16.5	9,752
	1954	5,407	8,898	14,305	10.7	40,391	3,011	1,544	38.7	433	17.5	9,797
Chicago & Eastern Ill.....	1955	2,834	3,095	5,929	8.5	52,759	3,115	1,568	35.4	1,167	51.3	7,704
	1954	3,413	2,722	6,135	5.3	49,924	2,875	1,391	33.9	921	42.0	6,306
Elgin, Joliet & Eastern.....	1955	7,775	8,018	15,793	9.1	53,328	2,792	1,504	35.2	91	16,156	8.7
	1954	8,214	14,991	23,205	5.5	52,367	2,599	1,372	42.1	248	9.5	16,136
Pennsylvania System.....	1955	116,959	86,269	203,228	14.6	52,290	3,062	1,391	31.9	595	29.1	12,244
	1954	109,060	94,616	203,676	8.9	54,069	3,071	1,354	31.8	557	28.6	11,473
Reading.....	1955	18,951	14,117	33,068	5.8	46,557	3,064	1,583	42.5	526	20.6	13,595
	1954	20,696	13,482	34,178	6.1	44,932	3,081	1,567	40.5	484	19.8	12,652
Western Maryland.....	1955	7,590	2,742	10,332	3.6	46,298	3,219	1,789	46.9	903	31.2	11,138
	1954	8,344	2,763	11,107	4.6	44,248	3,117	1,701	45.6	830	29.8	10,209
<b>Pennsylvania Region</b>												
Chesapeake & Ohio.....	1955	54,796	28,811	83,607	4.5	64,756	3,338	1,941	46.6	1,057	39.6	17,264
	1954	59,671	18,475	78,146	4.1	63,511	3,342	1,793	44.2	910	36.0	13,900
Norfolk & Western.....	1955	36,390	8,145	44,535	2.4	74,194	4,504	2,449	50.1	1,166	39.3	24,625
	1954	43,369	5,966	49,335	2.3	68,265	3,941	2,072	46.3	825	30.4	18,711
<b>Southern Region</b>												
Atlantic Coast Line.....	1955	21,065	16,631	37,696	3.6	41,588	2,334	1,011	32.1	782	42.9	5,423
	1954	21,825	16,301	38,126	2.0	41,823	2,467	1,061	31.9	764	42.2	5,317
Central of Georgia.....	1955	3,326	6,320	9,646	4.6	49,560	2,872	1,376	32.6	923	41.4	5,002
	1954	4,232	5,227	9,459	3.4	47,032	2,595	1,214	31.9	846	39.6	4,554
Gulf, Mobile & Ohio.....	1955	5,879	8,835	14,714	3.1	77,199	3,890	1,864	31.6	1,128	50.9	6,169
	1954	6,740	9,040	15,780	3.7	76,304	3,784	1,739	31.8	1,075	51.7	6,259
Illinois Central.....	1955	28,551	22,060	50,611	2.7	47,688	2,900	1,335	33.8	1,144	54.7	8,807
	1954	35,097	18,778	53,875	3.4	46,484	2,672	1,197	32.1	963	48.5	7,946
Louisville & Nashville.....	1955	34,022	12,303	46,325	5.5	50,882	2,944	1,485	37.9	905	38.5	8,984
	1954	41,597	11,881	53,478	3.1	45,992	2,645	1,303	36.9	733	32.5	8,022
Nash, Chatt. & St. Louis.....	1955	3,994	2,823	6,817	3.6	43,288	2,200	1,025	30.2	860	40.5	5,685
	1954	4,302	3,896	8,198	2.5	45,274	2,306	1,057	31.4	786	38.2	6,200
Seaboard Air Line.....	1955	13,832	14,061	27,893	2.7	54,384	3,001	1,331	31.9	1,001	50.4	6,829
	1954	14,322	14,403	28,725	2.2	53,657	2,955	1,278	31.5	959	50.0	6,664
Southern.....	1955	19,955	23,457	43,412	4.9	51,865	3,031	1,363	29.4	985	50.5	6,676
	1954	20,491	25,146	45,637	2.8	49,267	2,811	1,248	29.3	875	45.8	6,191
<b>Northwestern Region</b>												
Chicago & North Western.....	1955	17,421	28,016	45,437	4.9	51,576	2,881	1,366	30.5	674	31.7	3,919
	1954	21,742	26,687	48,429	5.5	50,898	2,951	1,321	31.0	605	30.6	3,666
Chicago Great Western.....	1955	2,045	4,289	6,334	3.2	73,340	3,865	1,761	29.9	1,260	60.3	5,334
	1954	1,887	3,861	5,748	3.6	73,330	3,868	1,721	29.3	1,271	63.4	5,193
Chic., Milw., St. P. & Pac.....	1955	35,669	30,622	66,291	6.6	54,305	2,863	1,267	30.1	621	31.8	3,849
	1954	37,951	28,724	66,675	6.2	53,141	2,900	1,272	30.1	631	33.0	3,864
Chic., St. P., Minn. & Omaha.....	1955	1,139	8,071	9,210	1.5	33,290	2,307	1,021	30.4	31.4	3.4	5,549
	1954	1,153	7,118	8,271	4.8	35,778	2,306	991	31.1	676	35.2	3,497
Duluth, Missabe & Iron Range.....	1955	14,593	620	15,213	1.6	21,438	1,500	723	36.8	45	2.2	1,207
	1954	14,957	590	15,547	2.5	19,421	1,338	644	36.7	44	2.3	1,215
Great Northern.....	1955	22,938	21,622	44,560	4.3	50,120	2,518	1,156	32.1	943	43.8	4,951
	1954	25,414	23,404	48,818	2.9	49,479	2,708	1,215	32.7	915	44.4	5,206
Minneapolis, St. P. & S. Ste. M.....	1955	6,227	7,135	13,362	6.6	44,532	2,155	996	29.9	865	41.1	2,934
	1954	5,582	6,360	11,942	5.8	41,593	2,067	946	29.8	834	42.1	2,783
Northern Pacific.....	1955	19,433	17,155	36,588	5.8	52,998	2,675	1,192	30.5	901	44.4	5,103
	1954	22,769	14,817	37,586	5.2	51,821	2,646	1,206	30.9	828	38.7	4,679
<b>Central Western Region</b>												
Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.)	1955	55,225	29,951	85,176	4.0	74,605	3,165	1,233	26.3	1,044	61.1	6,916
	1954	55,258	30,416	85,674	3.0	70,137	2,988	1,178	26.3	912	52.8	6,210
Chic., Burl. & Quincy.....	1955	23,381	20,711	44,092	2.9	56,805	2,683	1,195	29.1	1,011	51.2	5,100
	1954	21,952	20,576	42,528	3.0	58,290	2,795	1,241	29.2	1,045	53.2	5,058
Chic., Rock I. & Pac.....	1955	13,605	17,610	31,215	5.5	56,399	2,841	1,184	28.8	1,103	59.2	4,368
	1954	13,964	22,243	36,207	3.9	56,166	2,867	1,144	29.0	976	56.4	4,364
Denver & R. G. Wn.....	1955	7,770	5,542	13,312	3.9	63,815	3,365	1,628	33.7	1,098	46.5	6,928
	1954	8,884	3,861	12,745	3.0	63,854	3,297	1,621	33.3	1,053	43.5	6,162
Southern Pacific.....	1955	31,457	37,098	68,555	2.3	58,836	3,065	1,287	28.2	1,221	65.9	10,656
	1954	33,040	33,822	66,862	2.3	60,629	3,098	1,278	28.4	1,192	66.4	9,859
Union Pacific.....	1955	31,372	32,590	63,962	2.8	81,066	2,981	1,275	28.2	1,448	76.4	9,469
	1954	33,257	27,948	61,205	2.4	74,704	2,890	1,215	28.5	1,430	77.3	8,877
Western Pacific.....	1955	2,484	2,900	5,384	2.7	74,508	2,964	1,359	29.8	1,767	84.0	8,024
	1954	2,714	2,400	5,114	5.2	74,585	2,938	1,361	30.3			

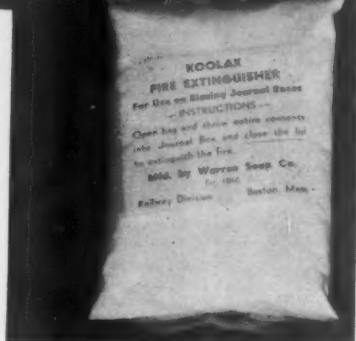
# What's New in Products



## Dry Extinguisher Powder For Journal Box Fires

A small (4¼-oz) package of dry extinguisher powder in a non-breakable plastic bag which, when opened and thrown into a blazing journal box, releases 230 cu ft of carbon dioxide to extinguish the blaze, has just become available.

The manufacturer claims the package is not harmful to persons or equipment, and is suitable only for extinguishing hot box fires. *Warren Soap Manufacturing Company, Railway Supply Department, Brighton, Mass.* •



hesive and the polyester backing. This produces a polished silver appearance. The manufacturer feels that railroads may find these tapes useful for decorative silver striping and emblems on their equipment.

Outdoor weathering tests are reported to show no change in appearance in nearly two years. Excellent resistance to acids, alkalis and other solvents is reported. The tapes retain their flexibility at low temperatures and are stable under conditions of high temperature and humidity.

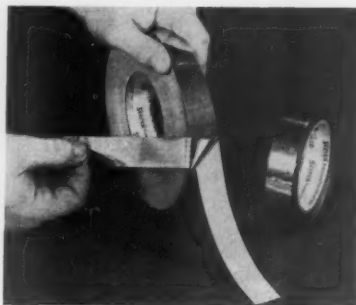
The two types are similar except that No. 852 tape has a printable surface and coated paper liner. Both are available in ¼-in. to 23-in. widths on 72-yard rolls. *Minnesota Mining & Manufacturing Co., 900 Fauquier st., St. Paul 6, Minn.* •



## Lambs-Wool Paint Roller

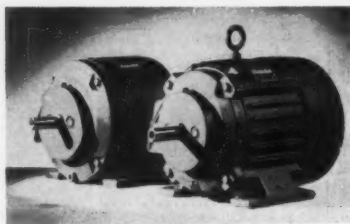
An all-new paint roller equipped with an extra long handle is said to provide maintenance men with a device for coating hard-to-reach wire-fence sections. This roller is equipped with a 10-in. long, double-grip, natural-finish hardwood handle and wire-con-

necting shaft, which provides an overall reach of 20½ in. It is reported that this will enable an average worker to coat both the top and bottom sections of a wire fence 9 ft high without stretching, straining and stooping. The roller is 7 in. wide and equipped with a 1½ in. thick lambs-wool pad. The extra-long nap of this pad is said to reach around the wire and coat about 70 per cent of the other side. The device is said to assure faster and more thorough fence coverage and longer roller life. *Rust-Oleum Corporation, 2799 Oakton St., Evanston, Ill.* •



## Pressure-Sensitive Film Tape

Silver-surfaced, pressure-sensitive film tape is now available. Scotch Nos. 850 and 852 are produced by vapor-depositing aluminum between the tapes' ad-



## Totally Protected Motors

Total protection has been built into these units from the solid-cast frames to the plastic sleeving that protects brazed coil head connections. Regardless of mounting positions, the motors are said to provide protection against drip, splash and falling objects. Ventilation louvers are positioned in out of the way positions in the end brackets.

The frame of the unit extends beyond the coil head to give full protection to the windings when end brackets are removed. Neoprene gaskets afford a positive seal between the frame and the conduit box. Conduit boxes can be positioned in any of the four quadrants for ease of installation. These motors are designed for a-c operation. *Reliance Electric & Engineering Co., 1088 Ivanhoe Road, Cleveland 10, Ohio* •

## Repair Kit for Reflective Signs

An all new Prismo Reflecto-Kit, containing materials required for revitalization of road signs which have been

damaged by severe winter weather, has recently been announced. It is reported that this kit contains a brilliant "moisture-proof" coating that is easy to apply and which has a life of from 5 to 7 years. It is claimed that the material is suitable for all types of traffic signs, markers and railroad rolling stock. *Prismo Safety Corporation, Huntington, Pa.* •



#### Self-Sticking Signs

Self-sticking accident prevention signs in three standard sizes, 5 by 14 in., 3½ by 10 in., and 2¼ by 9 in., are now available. The signs include both basic purpose signs (example: "Danger") and specific purpose signs (example: "No Smoking"). Either type can be used alone or in combination with other signs. Wordings and colors are as specified by American Standards Association standard Z-35.1-1941.

Made of impregnated cotton cloth with a temperature-resistant, pressure-sensitive adhesive, and mounted on individual dispenser cards, the signs can be applied by unskilled personnel without tools, screws, nails or bolts. *W. H. Brady Company, 727 West Glendale ave., Milwaukee 12, Wis.* •

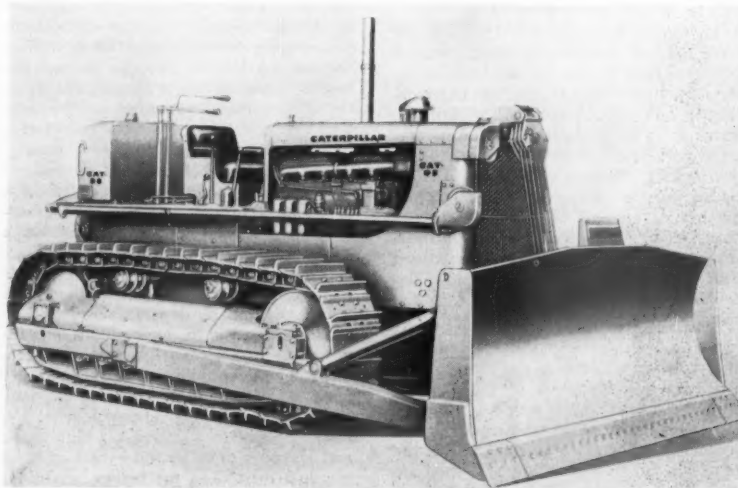
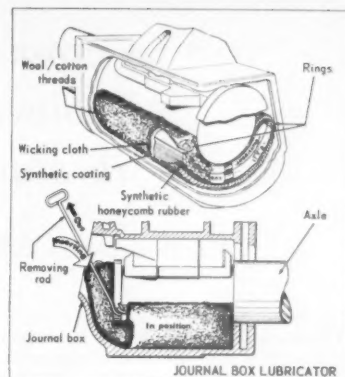
#### Journal Box Lubricator

The Miller Lubricator for plain freight car bearings has seen up to two years' service on a number of railroads in all types of weather. At present there are 2,500 car sets in normal interchange service on 20 railroads and car lines.

This lubricator was developed to reduce waste grab and shifted packing. It is a one-piece, non-mechanical, muff-shaped unit. It requires no mechanical changes in the journal box and jacking is not necessary for installation. Once installed, the lubricator is said to require only monthly oiling. The manufacturer claims it need not be removed from the box for three years, and then can be turned over so that a total service life of six years can be expected.



The lubricating medium next to the journal is a tough, heavy blanket of strong wicking cloth to which high quality waste is anchored by a special piercing process. This blanket is coated on the inside with synthetic latex to keep the oil from seeping away from the bearing surface when the car is standing. This is said to insure instant lubrication when the car begins to move. The pad is held in contact with the journal by a patented honeycombed center made of oil-impervious synthetic rubber that is claimed to retain its spring-like action throughout its service life and under all weather conditions. *Miller Lubricator Co., Winona, Minn.* •



#### Tractor Improved

The Caterpillar D8 tractor has been improved and will now be offered in two models, one with a torque converter drive designated the Series D, and one with a direct drive called the Series E. Numerous engineering advancements introduced on the new D8

units are said to make the machine more powerful, faster, easier to operate, easier to service and to provide new modern lines throughout.

All of the accessory equipment for use with the former D8 is adaptable for use with this improved model. *Caterpillar Tractor Company, Peoria, Ill.* •

# The President's Transportation Committee recommends A 20<sup>th</sup> Century Approach to some "19<sup>th</sup> Century" laws

*A cross section of America salutes the  
Cabinet Committee on completion of  
its study issued by the White House*

(All of the text following represents excerpts highlighting the report)

**W**ithin the short span of one generation this country has witnessed a transportation revolution . . . As late as 1920, the railroads held a virtual monopoly of intercity transportation . . . In striking contrast, there is available today a wide selection of transport methods . . .

The individual, whether traveling for recreation or business purposes, has a choice as between the private automobile, intercity bus transportation, air transportation, and railroad travel. The shipper, distributing finished products to a nationwide market, is free to elect the use of his own trucks, common or contract carriers by highway, a continental and physically integrated system of common carrier transportation by railroad, pipelines, coastal and intercoastal services, inland water transportation, or the rapidly developing air cargo services.

In major respects, government has played a decisive role in these fast-moving and dynamic changes in the organization, financing and operation of the Nation's domestic transportation services. All levels of government have participated. The states have played a dominant role in the provision of an expanding and modernized highway system . . . The Federal Government has spent vast sums of the general taxpayer's funds for the improvement of rivers and harbors . . . and has advanced substantial sums of money in the form of direct financial assistance for the development of air transportation.

The net result is a competitive system of transportation that for all practical purposes has eliminated the monopoly ele-

ment which characterized this segment of our economy some thirty years ago.

#### **"Government has failed to keep pace"**

During this same period, government has failed to keep pace with this change and has, in fact, intensified its regulation of transportation . . . The dislocations which have emerged from this intensified competition on the one hand, and the restraining effects of public regulation on the other, have borne heavily on the common carrier segment of the transportation industry.

No economy that is based fundamentally on mass production and distribution of products throughout a continental market can continue to prosper without a transportation system that is dynamic, efficient, and capable of delivering goods and people with safety, expedition, with a high degree of dependability, and at the lowest cost in the expenditure of manpower and other scarce resources. Historically, these requirements have been met most satisfactorily by common carriers, who by statute are charged with the heavy obligation to serve all individuals and shippers alike to the extent of their physical capacities, on known schedules at published rates, and without discrimination.

#### **Healthy transportation a public need**

The availability of this type of stable and dependable service is of equal importance in the day-to-day business operations, production and market planning of large and small businesses alike. Moreover, in a broader sense, the availability

of this type of transportation system is essential to the orderly and healthful operation of a peacetime economy and is indispensable to the national security in time of war.

Your Advisory Committee has proceeded from these fundamental premises in its reappraisal of national transportation policy: namely, that the transportation industry operates today in the general atmosphere of pervasive competition; that adjustment of regulatory programs and policies to these competitive facts is long overdue; and that the restoration and maintenance of a progressive and financially strong system of common carrier transportation is of paramount importance to the public interest . . .

Notwithstanding the rapid growth and current pervasiveness of competitive elements in transportation, government policy holds regulated competitive forces within a tight rein . . . a transportation system which best meets the needs of the public . . . is to be achieved only by the exercise of greater freedom for competitive experimentation which enables the purchaser of transportation to adapt both service and cost opportunities to his own requirements.

#### **The essentiality of common carrier transportation**

The public interest requires the maintenance of a sound and vigorous common carrier transportation service by all of the available means of transport, each operating within its respective capabilities and developing in accordance with the indicated demand for its services. Such com-

**Terming present regulation "obsolete,"  
the Cabinet Committee Report, finds:**

"Our national policy has not provided us with the best transport of which we are capable . . . In many respects, government policy at present prevents, or severely limits the realization of the most economical use of our transportation plant." Again, *"The shipper and ultimately the consuming public pay the costs . . . The consequent loss to the public, while incapable of exact estimate, is believed to amount to billions of dollars per year, and calls for prompt and decisive action."*

**—and recommends:**

"Revise the National Transportation Policy to Assure Maintenance of a National Transportation System Adequate for an Expanding Economy and for the National Security, to Endorse Greater Reliance on Competitive Forces in Transportation Pricing, to Reduce Economic Regulation of Transportation to a Minimum Consistent with Public Interest, and to Assure Fair and Impartial Economic Regulation."

This advertisement,  
originally published  
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is reprinted in the  
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*The Federation for Railway Progress, Washington, D. C., is an organization of 20,000 members comprising railway employees, security holders, shippers, suppliers and travelers interested in the well-being and development of railroads.*

mon carrier service is indispensable, yet the financial position of some of the major common carriers is precarious and they lack the means to offer superior service and to apply technological advances with desirable rapidity.

Both the present force of competition, including that from other than common carrier transportation, and the unusual obligations which are placed upon common carriers argue for relieving these carriers as far as possible from restraints designed to meet conditions which have, in recent years, either disappeared or been greatly altered . . .

With some exceptions, regulated common carriers today encounter large and growing competition . . . largely opportunistic in character. These operations are conducted without the necessity to publish rates, with freedom to discriminate in rates and service, and with no obligation to serve the general public. The continuing growth of this exempt for-hire carriage would seriously impair the maintenance of a strong and healthy common carrier industry.

**Transportation—bulwark  
of our security**

While a general transportation policy should concern itself primarily with our developing national economy, it must also be concerned with potential defense

requirements. In the latter context two primary objectives may be noted: (1) to emphasize the growth and development of the several forms of transport somewhat in accord with the proportional demands that defense will make upon them, and (2) to support their financial well-being to the end that they will be physically in excellent shape and possessed of a desirable flexibility and some degree of excess capacity. A policy under which the transportation enterprises generally live in precarious financial position is not a policy calculated to enhance our preparedness. Any policy which has the effect of weakening any form of transportation on which we must place major reliance in the event of war is not a satisfactory defense policy.

It may be necessary that particular modes of public transportation absorb a large share of the anticipated increase in domestic traffic and in addition take on substantial diverted loads in the face of conditions which prevent any material expansion of their physical plant or equipment . . . The railroads may be expected to have the greatest flexibility in accommodating an expanded domestic traffic with a minimum increase in equipment, since other forms of transportation as a rule require additions to equipment in direct ratio to an increase in traffic handled, and this is not the case with

the railroad industry. Any policy which strengthens the railroad base will tend to increase the built-in flexibility of our transportation plant. Public interest, however, attaches to a national policy which enables all segments of the carrier industry including air, water, highway, and pipeline industry to make their respective contributions . . .

Related to the foregoing considerations is the problem of developing and strengthening our coastal, intercoastal, and inland services by water. It is important to the national economy and to defense that these operations be both financially strong and prepared to meet their role in emergencies . . .

[C]arrier operations other than those of the regulated common carriers . . . do not obtain an equally intensive utilization of equipment and manpower, and hence they contribute less to a war effort than do common carriers in proportion to the input of scarce materials and equipment. A stronger common carrier segment attained in part by the substitution of common carriers for others, greatly simplifies the problem of wartime supply.

Emphasis on the essentiality of common carrier transportation does not imply that bona fide private carriage and true contract transportation are not useful and economic components of the national transportation system.

# New York Central Railroad

## QUICK RESPONSE makes the difference!



### NON-SPIN HAND BRAKE

## eliminates costly car-impact damage

Quick response, speed is what counts with hand brakes. Speed makes the difference between safe, efficient braking or costly car-impact damage. Any brakeman knows that spotting cars takes good braking judgment and immediate action. That's why immediate response in the hand brake is so important.

Equipco Hand Brakes are easily controlled with one hand—allowing the other hand to hold onto the grab iron for safety at all times. By

simply turning the wheel, the brake is set, partially released or completely released. There are no levers or gadgets to waste time or cause confusion.

For speed AND safety, specify Equipco Non-Spin Hand Brakes. Available also are the drop-type hand brake for flat cars, and the lever-type hand brake for drop-end gondolas. Every brake is A.A.R. Certified. Write today for free booklet, "Hand Brake Safety."

### EQUIPCO HAND BRAKE DIVISION UNION ASBESTOS & RUBBER COMPANY

332 South Michigan Avenue • Chicago 4, Illinois



UNARCO FIBROUS PRODUCTS DIVISION manufactures superior insulations—WOVENSTONE®, INSUTAPE, INSUTUBE—all specifically designed for railroad requirements

## Cost-Finding Is Risky, But Riskier to Evade

Few railroad men are able to work up any enthusiasm for cost-finding. Their misgivings are justified. Poorly informed people are all too likely to accept "cost" computations as solid facts. Actually they are like the hand pointing to "fair," "stormy" or "change" on an aneroid barometer. The inexperienced take these barometric indications to mean literally what they say. The experts know that real significance lies in the way the hand is moving—not the word or number it points to at any particular time.

Another reason for justifiable suspicion of systematic cost-finding is the likelihood that the continuing revelation of such figures would invite attack on all rates thereby indicated as being substantially profitable.

The deserved unpopularity of cost computations with most railroad people does not, however, dispose of the problem. When a disease is serious and no mild cure for it is known, sometimes the physician is forced to prescribe a remedy which is dangerous or unpleasant. Where the only alternative lies between a great danger and a lesser one, it would appear to be the course of prudence to lay hold on the lesser.

Evidence is piling up, pointing strongly to the conclusion that greater attention to cost-finding techniques by the railroads may be inevitable—if further uneconomic diversion of traffic away from the rails is going to be halted. To those who may suspect the soundness of this conclusion, it is our suggestion that they read the document entitled "Explanation of Rail Cost Finding Procedures and Principles Relating to the Use of Costs," issued in November 1954, "as information" by the ICC's Cost-Finding Section. Much of the material in this document is over the heads of non-experts, such as ourselves—but even to the layman it becomes clear enough that the ICC cost-finders are doing their work under some assumptions which may be questionable. For example:

In seeking to determine what proportion of railroad costs are variable (otherwise known as "direct" or "out-of-pocket") the ICC cost-finders compare two periods, one of relatively light traffic and a later period of heavier traffic. Because ex-

penses in the period of heavier traffic show an increase, the cost-finders assume that the increased traffic *caused* all the increased expense. Because maintenance-of-way outlays usually rise with increased traffic, the cost-finders challenge the historic assumption that maintenance-of-way costs are relatively constant.

Maintenance outlays were observed to have increased in some territories by an even greater percentage than the increase in traffic. From this fact the cost-finders conclude that there has been "a reversal of the historical trend toward lower rail unit operating costs with added volume." With due respect for the ability, integrity and honest intentions of the ICC's cost-finders, this conclusion of theirs looks like the kind of argument known as *post hoc, ergo propter hoc*.

Every practical railroad man knows that maintenance costs are a lot more uniform than maintenance expenditures. The costs go on even when the money isn't being spent—with the result that there is a lot of catching up to do when more money comes into the till as the result of a traffic increase. The maintenance outlays do not fluctuate because traffic fluctuates, but because available funds fluctuate.

An able transportation economist makes this observation of the ICC staff's approach to cost-finding:

"Those who have the responsibility for the preparation of ICC cost studies would appear to be strongly influenced by the views of a group of economists who were considering railroad costs more from the standpoint of discriminatory charging than from the standpoint of maximizing railway net revenue. Much of the writing of this school of economists, moreover, was done at a time when railways had a monopoly over the transportation market and when a high degree of cross-subsidization was recognized as being in the best interests of national transportation policy and for this reason had been given legal sanction. Such competition as did exist was essentially 'monopolistic competition' or competition between like carriers. Today the problem is competition between carriers entirely different in cost and service characteristics, which raises an entirely new set of problems and requires a fresh approach to the whole question."

Granting the validity of all the arguments against systematic cost-finding by the railroads, it nevertheless seems inevitable that railroad people have got to become a lot more expert in this area, at least with regard to cost-finding *methods*. The ICC cost-finders, in sustaining their position, quote an ICC decision which disclaimed perfection for ICC cost-finding methods, but added that the railroads "have not supplied us with any better ones." That is a fair statement of fact, and a challenge which it seems just plain improvident to ignore.



EXTENDING four miles from end to end and 1,500 ft in width, the SP's new gravity-switching yard at Houston will be able to handle upwards of 3,500 cars per day when completed. Of its 48 classification tracks 22 are now in service.

IN PARTIAL OPERATION . . .

## Houston's "Electronic" Yard

T&NO's new hump-retarder facility is scheduled for dedication this fall—Incorporates latest in "push-button" switching, automatic retarder equipment

An average of 3,500 cars per day are expected to move through the new Englewood yard of the Texas & New Orleans (Southern Pacific) at Houston, Tex., when the installation is completed early this fall. The \$7-million gravity switching yard is now 66 per cent complete and has 22 of its proposed 48 classification tracks in service.

The four-mile-long facility will comprise a 2,700-car classification yard; 11 receiving tracks for 1,310 cars;

a 1,400-car, 12-track departure yard; a 10-track make-up yard for 650 cars; and 4 interchange tracks with a capacity of 395 cars.

Cars coming over the 27-ft hump crest will be routed to the various classification tracks by "push-button" control. The crest-tower operator presses a button on the automatic switching machine to route each of the cars or groups to the proper classification track.

**"Push-button" switching;  
Automatic retardation ...**



**MOVING** down the hump from crest, cars are routed to proper classification tracks by "push-button" controls. Retardation is fully automatic, with electronic control.

Retardation of cars coming down the hump is completely automatic. The retarder system, furnished by the General Railway Signal Company, incorporates radar and electronic computing devices to measure the "rollability" of cars as they approach the retarders. By correlating the three principal factors—acceleration of cars, weight of cars and the track to which the "cut" is to be routed—an "electronic brain" computes the amount of pressure the retarder should exert against the car wheels. The retarders are thence automatically activated by the "brain" to exert the proper dampening effect on the cars. Factors introduced by the distance a car is to roll and weather conditions may require a little cooperation from the tower operator.

Communications in the yard area will include 18,000

**RETARDER-control tower** is manned by operator who monitors movement of cars down hump to see that things run smoothly. ►



**CONTROL TOWER** with three levels is located at crest of hump and serves as "nerve center" for car-classifying operations.





**WEIGHING** of cars is handled by a 92-ft electronic scale which is connected to automatic recording equipment.

ft of 6-in. pneumatic tube and 6,000 ft of 3-in. tube that will be used to send waybills and messages between key points.

In addition there will be 31 miles of underground communications cable crisscrossing the yard. The area will be served by 38 paging speakers and 238 talk-back speakers, and yard engines will be equipped with two-way radio.

#### **Other Communications Features**

The communications system will also include six Teletype machines, a PAX telephone system, the latest-type high-fidelity recording apparatus and PBX telephones. To record all train and car movements, IBM coding and carding equipment has been installed.

The yard has two tower structures, now completed and in service, and 24 buildings from one to three stories high.

The general yard office building has 6,400 sq ft of floor space and is completely air conditioned. Principal structures in addition to the general yard office include a three-story control building at the hump crest, a power and retarder-equipment control building, a building for interlocking control, four inspection-station buildings and five large locker rooms.

Control panels for the retarders and stand-by manually operated switch equipment are housed in a 40-ft tower manned by an operator who monitors the movement of cars down the hump. He keeps close watch on the automatic features of the retarder control equipment

and, where necessary, superimposes manual control on the retarders and switches. Another tower, 50 ft high, is the "nerve center" of the yard. From it the yardmaster oversees the entire yard operation and directs movements throughout the area.

#### **Cars Get Complete Inspection**

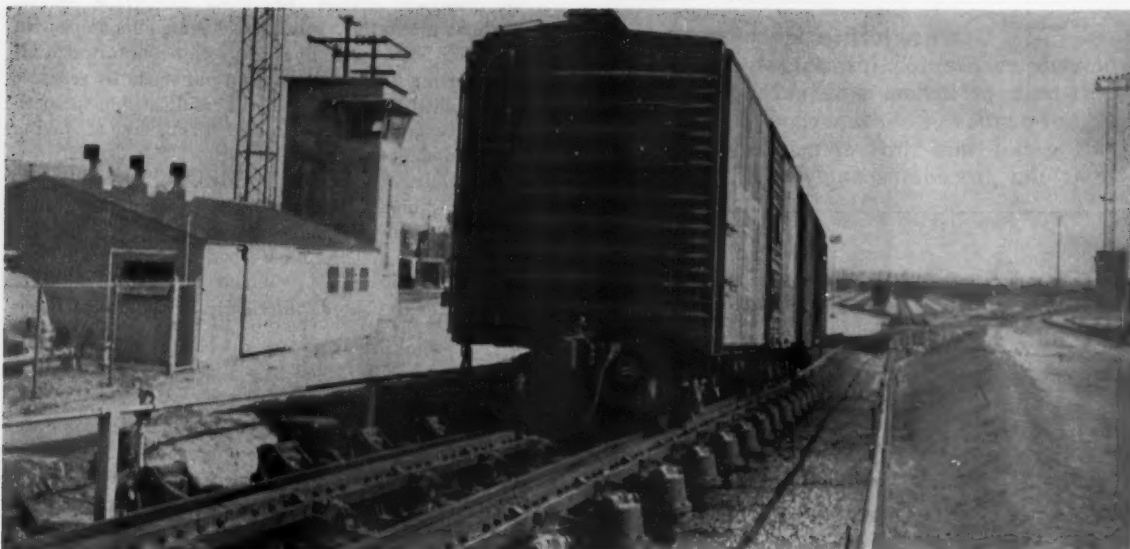
As cars move up the hump lead to the crest they pass over dragging equipment detectors. At the same point the cars receive a running inspection by car inspectors in ground-level stations, whose eyes are at the top of the rail, and at high-level stations, where they have a good view of the tops of moving cars.

A 92-ft electronic scale just west of the crest weighs cars as they move down the incline to classification tracks. The scale consists of two bridges supported on eight load cells by which the weights are computed. The weights are automatically recorded on specially prepared scale tickets.

#### **45 Trains a Day During Construction**

During the course of construction the road has continued to handle an average of 45 trains in and out of the yard each day, in addition to regular intraterminal switching transfers.

Still in the formative stages are plans for day and night testing of industrial television as an aid to operation of a large interlocking plant at the west end of the yard.



COMPATIBLE inter-road car reporting systems should aid materially in getting better utilization of equipment.

WHY RAILROADS SHOULD DEVELOP . . .

## Compatible Car Report Systems

By **DR. FRED J. KNIGHT**

Management Consultant  
Cresap, McCormick & Paget

One of the significant new railroad applications of electronic equipment is in car reporting. A few pioneering roads already are operating systems whereby car reports are wired to important centers for quick processing by punch card machines. By this new method, yardmasters are informed of incoming train consists well in advance of train arrival. This to a great extent permits the composition of outgoing trains to be determined before the cars arrive. Thus little delay is experienced in putting outgoing trains together and getting them on the road.

Reports on car movements also are wired to central bureaus, from which up-to-the moment information is available to shippers. Any shipper on the line can thus be informed quickly just where his car is, and when he can expect arrival.

Two potential major benefits are offered by telegraphic communication and electronic processing.

1. *Gain in car loadings* resulting from customer satisfaction with faster service and reliable advance reporting of arrival time.

2. *Reduction of investment in rolling stock.* Car time lost in yards is reduced by train make-up. Better information on location of empties helps get them to customers faster. Reliable schedules of car arrival time enable customers to load and unload sooner.

The value of improved service is not easy to calculate reliably. Doubtless opinions would vary as to how much gain in carloadings could reasonably be expected; and

any gains probably vary according to circumstances. There can be no doubt, however, that better service is one of the best ways of meeting truck competition. Furthermore, because of high fixed costs, a small percentage increase in car loadings can result in sharp increases in railroad net profits.

Perhaps the best evidence of the value of modern car reporting service is given by (1) the expressions of satisfaction of those who have already installed it; and (2) the growing number of roads beginning to design their own systems. It is a good possibility, if not a probability, that most major roads will have electronic car reporting and data processing within a few years.

Such evidence of alertness and initiative is a good omen for the railroad industry. Yet, commendable as these efforts are, there is danger that they may bring about unanticipated difficulties. It is evident that, when and if these systems become commonplace, it will be a

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"... The railroads . . . might go so far as to establish a cooperative [car reporting] service open to all railroads. Such a unified service might have 50 data processing centers strategically placed in the country. . . . A nationwide system could make effective use of the new 'giant brains.' These are too expensive and of too great capacity for use by individual car reporting systems."

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**"... Our new office machinery and procedures are too intricate to yield to part-time attention. Adequate organization of a study of car reporting should provide a full-time staff of experienced systems and procedures analysts. . . ."**

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very great advantage to be able to interchange information between railroads. Such interchange will be cumbersome and perhaps impracticable unless there is considerable standardization in system design. For instance, the same holes in a punched card should have the same significance in all systems. There should be agreement as to the use of transmission symbols. There are many such details which can be standardized only if the efforts of individual railroads are coordinated.

The degree of cooperation obtained eventually by the railroads might reach any of several levels. It might stop with cooperation in engineering and systems design sufficient to facilitate voluntary interchange of information between "friendly" railroads. Or it might go so far as to establish a cooperative service open to all railroads of the nation. Such a unified service might have 50 data processing centers strategically placed in the country, and offering service to everyone.

Lest the latter suggestion be regarded as too radical for serious attention, it would be well to review some of the added values which a national cooperative system could develop.

1. *Better service to shippers everywhere.* Inclusion of all railroads will provide patrons with information on cars which are off-line as well as those on system lines. Likewise, yardmasters will have advance data on cars to arrive shortly from other lines.

2. *Cost reduction to all participants.* Unified service presumably would eliminate duplication of wire rentals, equipment cost, organization and personnel. Cost of communication with agents and shippers would be reduced to each railroad, for no part of the country would be far from a reporting center. Small railroads which could not afford service by themselves would be able to obtain it. Their proportionate contributions would improve the service and reduce costs to the larger railroads also.

3. *A better system might be designed.* Acting as a group the railroads could undertake a very thorough study to determine the best possible equipment, and system, and also the best possible way of organizing and operating it. The cost to each road would be small. The benefits presumably would be comparable to those resulting from joint research into other common railroad problems, such as track wear or tie life.

4. *Superior equipment might be obtained.* Acting singly, railroads have had to be content with adopting standard office and communication equipment. Action in concert might persuade manufacturers to design and build special equipment to meet the railroads' particular needs. It is likely that a nation-wide system could make effective use of the new "giant brains." These are too expensive and of too great capacity for use by individual car reporting systems.

An integrated system, providing top grade service throughout the nation, would have maximum impact in competition with truck lines. It will be unfortunate if a car reporting network is built up piecemeal by separate roads or allied groups. These will result in non-compatible, fragmentary systems aimed primarily at taking traffic from other railroads.

The building of non-standardized, incompatible systems is now under way. Should it proceed far, it will become extremely difficult ever to develop a unified, interchangeable system. Each road naturally will find it difficult to abandon investment in its own kind of equipment, or to concede inferiority of the system it has chosen.

#### **Time for Action?**

It is premature, perhaps, to assume that electronic car reporting ever will become commonplace. At the same time, however, we must recognize that there is a real possibility that such a development will occur. We must realize also that a policy of "wait and see" may delay action until it is too late to obtain maximum benefits without extensive abandonment and rebuilding.

What is the part of prudence in such a situation? Would it not be an exploratory investigation undertaken jointly by the industry? An initial inquiry might be pointed at answering three basic questions.

1. What potential industry-wide values exist in improved car reporting (a) through increasing car loadings; and (b) through reducing investment in rolling stock?

2. How great are the added potential values offered by railroad industry cooperation, as compared with uncoordinated development by individual lines?

3. What plan for cooperative action is now advisable?

#### **Technical Survey**

Basic questions such as these are not easy to answer in terms specific enough to be satisfying. The intangibles are, however, no greater nor more illusive than those which must be evaluated in dealing with many commercial marketing problems. Modern survey and report writing techniques are adequate to reduce such issues to tangible terms and to appraise them objectively enough to give management a sound base for making important decisions.

Assuming that the initial inquiry indicates substantial values to the industry in cooperative action, a program

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**"An integrated [car reporting] system . . . would have maximum impact in competition with truck lines. It will be unfortunate if a car reporting network is built up piecemeal by separate roads or allied groups. These will result in non-compatible, fragmentary systems aimed at taking traffic from other railroads. The building of . . . incompatible systems is now under way."**

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for further action could be started. This probably would follow recommendations developed from the initial investigation. Probably it would penetrate one or two major areas, such as:

1. Technical survey of system and equipment, i.e., (a) study of existing systems and equipment; and (b) recommendation of the best possible uniform system, practicable for general adoption, which would facilitate interchange of information between railroads.

2. Organization survey to appraise the relative advantages of various methods of organization, operation, and finance, e. g., (a) private ownership and operation by individual railroads, with limited interchange of information on a voluntary basis; or (b) joint ownership of cooperative nationwide service.

The particular subjects for inquiry which are listed above were selected for illustrative purposes only. An actual investigation would be focused on those questions which seemed paramount to those sponsoring the work.

#### Who Can Act?

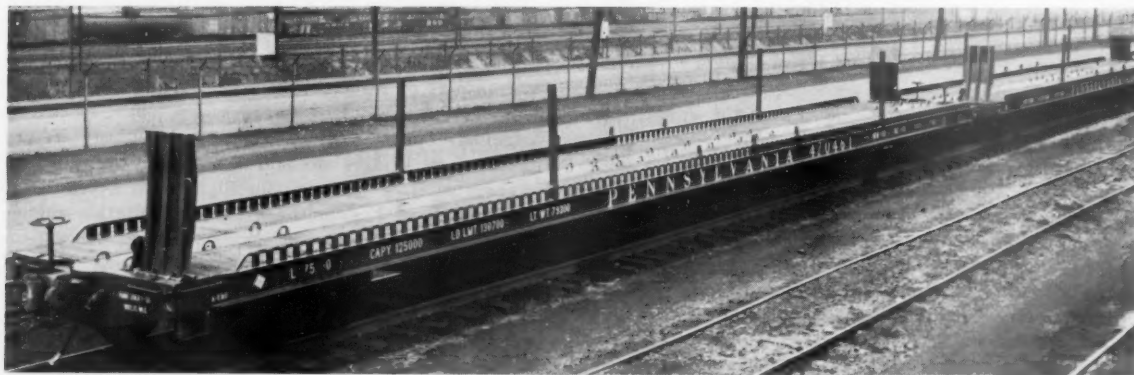
It seems a logical function of established railroad organizations to promote joint research into questions of wide concern throughout the industry. This principle is recognized in the establishment of permanent research centers for study of maintenance problems. Is there not a similar mutual interest to be served by joint sponsorship of research into systems and procedures? A vast array of productive new ideas for mechanizing office work has opened great potentials for faster, more accurate, and cheaper reporting. Car reporting is only one

of these; similar opportunities lie in storekeeping, accounting, or budgetary control. There is every reason to believe that joint research into these subjects would prove highly profitable to the railroad industry.

No one seeks to deprecate the value of the many contributions made by individuals working on committees in these fields, often at great sacrifice of personal time and convenience. But our new office machinery and procedures are too intricate to yield to part-time attention.

Adequate organization of a study of car reporting should provide a full-time staff of experienced systems and procedures analysts. These men should be of the highest grade, for the task is not merely to improve on existing procedure, but to invent a new one. The team should include a man of exceptional insight into practical organizational matters, to assure adequate treatment of questions of how best to organize, operate, and finance a car reporting system.

Sponsorship of such an enterprise would seem a proper move for one of the industry organizations. Lacking quick action from this source, a small group of railroads could well afford to contribute to a joint project. Joint sponsorship is desirable not so much to spread the cost of the work, which would be moderate, as to assure industry-wide representation and cooperation. Direction of the enterprise could well be supplied by a committee of railroad executives appointed by the sponsoring body. Recruitment of a competent working staff might come by loan from interested railroads, by employment of analysts from industry, or from a management consulting firm. Possibly, all three sources could be tapped.



TWO of the TrucTrain cars—each long enough to carry two standard trailers—ready for delivery to the Pennsylvania.

## PRR Cars for "TrucTrain" Service

The 75-ft flat cars put into the Pennsylvania's TrucTrain service between New York, Philadelphia, Pittsburgh and Chicago on March 3 were designed primarily for the safe, efficient and speedy handling of two highway trailers per car. The design, in which the builder cooperated with PRR engineers, also provides for a second-

ary objective: namely, a car meeting AAR loading rule requirements and therefore suitable for general service. Two hundred of these cars were recently completed at the Bethlehem Steel Company, Johnstown, Pa., plant.

The car underframe is a welded structure using two 30-in. wide flange beams with top and bottom cover



ILLUSTRATING how trailers are backed onto the end-loading TrucTrain cars.

plates for center sills and 12-in. by 35-lb car building channels for side sills. Mayari-R low-alloy high-tensile steel was used in center and side sills, as well as in other parts of the structure subjected to high stresses.

Cross members are of the welded web and cover plate type, except the cross ties, which are 6 in. by 15.5 lb wide flange beams.

Oak decking, 2 $\frac{3}{8}$  in. thick, flush with top of side sill channel, extends between side and center sills and is supported on three rows of floor stringers, on each side of center sill, two of which are 4 in. by 8.2 lb Z-sections. The stringers adjacent to the center sill are 6 in. by 15.5 lb wide flange beams; heavier stringers are required at this location to take the reaction from trailer supporting jacks. Decking is secured at side sill and inside stringer with watertight bolts and welding studs.

The side curbs which serve as a guide in spotting trailers and as an anchorage for trailer tie-downs are 2-in. extra heavy pipe supported on side sills by 3 $\frac{1}{2}$ -in. by 2 $\frac{1}{2}$ -in. by 5/16-in. angle columns.

A tool box with flush hinged lid is built into the center sill at each end of the car, where American Forge tie-down equipment, Brandon wheel chocks, Duff-Norton jacks, and jacking beams can be carried when cars are in general service or moved empty.

The cars are equipped with AB-1012 freight brake equipment with two reservoirs and two 10-in. cylinders, one cylinder piloting a relay valve to supply air to the second cylinder. Two Universal drop staff type hand brakes, one at each end of the car, operate independently, one for each truck.

Each car is equipped with the following special equipment for securing trailers to the car:

*Jacks, screw type:* 4 front and 4 rear.

*Tie-down units:* 16, each consisting of  $\frac{3}{8}$ -in. high tensile chain, ratchet load binder, snubber, and hooks for attachment to trailer and car anchorage.

*Jacking beams:* 4, cast steel, self-locking.

*Wheel chocks:* 4, with locking bars.

Transport of trailers from one car to another is accomplished by means of hinged bridge plates, located at diagonally opposite corners of the cars. When cars are moving these bridges are held in a vertical position.

These cars are equipped for high speed freight service, with Type F couplers, National Malleable rubber cushioned draft gears, and spring plankless 3-11/16-in. spring travel, SKF and Hyatt roller bearing trucks equipped with 33-in. multiple wear steel, heat-treated wheels. Trucks are ASF pedestal type with Ride Control package and Buffalo unit brake beams.

## PRINCIPAL DIMENSIONS AND WEIGHTS

Length over end sills, ft-in.....	75	0
Length over strikers, ft-in.....	75	8
Length between pulling faces of couplers, ft-in.....	78	4-3/4
Truck centers, ft-in.....	63	0
Width over side sills, ft-in.....	9	6
Width between curb rails, ft-in.....	8	10-1/2
Height—rail to top of floor—light car, ft-in.....	3	5-5/16
Height—rail to bottom of center sill, ft-in.....	0	9-9/16
Weight of trucks, lb.....	19,190	
Weight of body, lb.....	60,210	
Light weight of car, lb.....	79,400	
Capacity, lb.....	125,000	
Load limit, lb.....	130,000	



**GENERAL COMMITTEE MEMBERS AND OFFICERS** of the Purchases & Stores Division meeting in the Palmer House, Chicago, June 15.

Seated are, left to right: O. O. Albritton, vice-president, Illinois Central; A. L. Prentice, vice-president, New York Central; W. H. Lloyd, stores manager, Rock Island; J. L. Timanus, secretary, P&S Division; C. E. Woodson, executive vice-chairman, P&S Division; G. E. Wilson, manager of stores, Reading, and chairman of the division; A. N. Laret, vice-president, St. Louis-San Francisco; V. N. Dawson, assistant purchasing agent, Baltimore & Ohio; and C. F. Bayer, manager, purchases and stores, Lackawanna.

In the same order, standing, are: N. B. Coggins, general storekeeper, Southern; G. M. Betterton, general purchasing agent, Southern Pacific; W. W. Kelly, general purchasing agent, Santa Fe; L. G. Kohler, general storekeeper, B&O; V. E. McCoy, chief purchasing officer, Milwaukee; J. R. Fullerton, general storekeeper, Missouri Pacific; F. J. Steinberger, assistant general purchasing agent, Santa Fe; H. O. Wolfe, purchasing agent, Gulf, Mobile & Ohio; C. E. Reasoner, general storekeeper, Missouri-Kansas-Texas; H. P. Millar, manager of stores, Canadian Pacific; J. F. Duffy, manager of stores, Erie; and C. E. Swanson, assistant general purchasing agent, CB&Q.

## PURCHASES AND STORES OFFICERS STUDY

# How to Get More for \$1.6 Billion

Annual meeting of AAR division continues search for greater economy and efficiency in handling and procuring supplies and materials

**P**roblems related to spending an estimated \$1,600,000,000 on fuel, materials and supplies in 1955 were discussed by railroad officers from the United States, Canada and Mexico at the May 16-18 annual meeting of the Purchases & Stores Division of the Association of American Railroads. George E. Wilson, manager of stores, Reading, and chairman of the division, presided over the meeting, which was held in the Palmer House, Chicago.

Joseph A. Fisher, president of the Reading, addressed the May 16 opening session. Development of the nation's transportation so each carrier could perform its job with the greatest overall economy to users would be aided by congressional adoption of recommendations of President Eisenhower's Advisory Committee on Transport Policy and Organization (the so-called Cabinet Report), he said. Mr. Fisher cited estimates in the report that failure to achieve distribution of traffic according to the economic capabilities of the various carriers costs the public billions of dollars a year.

"The facts developed by the committee are too vital

to the nation to be ignored," he emphasized, "and the recommendations are too important to every individual to be allowed to lay dormant. It is time to move the transportation clock up where it belongs."

Reports of 10 subject committees also were presented to the meeting on May 16.

The report of the Committee on Scrap, presented by its chairman, N. B. Coggins, Jr., assistant general purchasing agent of the Southern, said that more than 3,615,000 tons of ferrous scrap were returned to the metals industry last year by U.S. railroads. The 1954 figure—which included 534,000 net tons of "on-the-hoof" items such as entire cars, locomotives, machine tools and other heavy equipment—brought to more than 30,000,000 the estimated number of tons of scrap iron and steel turned back to production processes by railroads in the last seven years. That total is about 14% of all scrap purchased by the steel industry during the period.

"Scrap yards should be equipped with diesel or diesel-electric locomotive cranes wherever justified," the report

added. "Generally, their costs can be amortized in a relatively short period of time. If the operation is not of sufficient volume to justify the more expensive locomotive type cranes, possibly diesel truck cranes would serve economically."

Expense of maintaining roadway signs, although a large item in a railroad's budget can be reduced materially by centralizing production of the signs, said the report of the Committee on Reclamation, presented by its chairman, W. G. Muschler, superintendent scrap and reclamation, Burlington. Such centralization, the report said, would release maintenance-of-way crews from annual painting programs and would permit greater economies by control of stocks of reflectorized material.

### **Signal Material Report**

J. B. Cady, assistant general purchasing agent of the Southern, presented the report of the Committee on Electronic, Signal and Communications Material of which he is chairman. The committee reported it had a "definite commitment" from a major manufacturer of signal equipment to cooperate in producing a price list for electronic material. "Their first endeavor," the report continued, "will be to produce a stockbook of component parts of signal material that have been purchased repeatedly during the last five years. This list will first be presented in alphabetical order for verification. The items will then be priced and submitted in part number sequence. This catalog, when completed, may include as many as 250,000 items . . . [and] will be furnished in installments, with completion anticipated in about one year."

Such a price list, the report went on, will eliminate much paper work previously done by both supplier and purchaser and will expedite receipt of materials.

Railroad inventory control will be greatly assisted, the report said, as a result of establishment by the same signal manufacturer of a program for warehousing commonly used items. The committee also has arranged with a large radio manufacturer for local distribution of radio repair equipment through authorized distributors, at no premium in price, insuring immediate availability of repair parts without need to inflate railroad inventories. "This manufacturer has indicated a willingness to establish such distribution systems throughout the entire country, and it is hoped other manufacturers of radio equipment will follow suit."

### **Petroleum and Coal Report**

H. E. Martin, purchasing agent of the St. Louis-San Francisco, presented the report of the Committee on Petroleum Products and Coal, of which he is chairman. The report said railroad expenditures for petroleum products and coal last year totaled \$468,000,000, nearly one-third of the entire amount spent by Class I railroads in 1954 for supplies and materials.

The oil industry received more than \$346,000,000 for diesel and residual fuel oils and gasoline consumed in 1954 train operations. Another \$81,000,000 was spent by Class I roads for bituminous and anthracite coal last year. Railroad purchases of diesel oil alone last year amounted to \$308,000,000, up \$8,000,000 over 1953.

The committee reported it has been working with petroleum firms on a project designed to develop a more economical but equally efficient diesel fuel oil. Stability of the new-type oil would be satisfactory despite prolonged storage and varying climatic conditions.

Charles F. Honeywell, administrator of the Business and Defense Services Administration, U.S. Department of Commerce, spoke at the annual luncheon May 17.

"It is pretty generally felt among government agencies," he said, "that our present supply of freight cars is critically short of the number we would need to meet civilian and defense requirements if we became involved in a new emergency."

If this feeling is confirmed by the committee appointed by Dr. Arthur Fleming, director of the Office of Defense Mobilization, to study rolling stock and motive power requirements for full mobilization, Mr. Honeywell continued, it will become BDSA's responsibility to determine the capability of the country for production of freight cars, including plant capacity, material and components.

This will be done, he said, by a task group appointed by BDSA, with the cooperation of the AAR, the American Railway Car Institute and the American Short Line Railroad Association. The task group also would be charged with recommending to the ODM ways and means of financing any needed railroad-car building program "without subsidizing the American railroads."

### **Railway Age Essayist Wins Again**

At the May 17 morning session, F. W. Pettit, general purchasing agent of the Western Maryland and chairman of the division's Annual Essay Contest Committee, presented the authors of this year's two winning papers: John D. McGann, storekeeper of the Chesapeake & Ohio at Hinton, W. Va., and George M. O'Brien, stationery storekeeper of the Lackawanna at Scranton, Pa.

Mr. Pettit pointed out that Mr. McGann also had submitted the winning paper in last year's *Railway Age* contest for essays on a purchases and stores topic. Mr. McGann's winning entry in this magazine's contest was published in *Railway Age*, November 1, 1954, page 61.

J. S. Thomas, director of purchases, Armco Steel Corporation, addressed the May 17 morning session, outlining the organization and procedures of a purchasing department in the steel industry.

Among subject committee reports presented on May 17 was that of the Committee on Purchasing Department Procedures, offered by its chairman, J. R. Clary, general purchasing agent of the New York, Chicago & St. Louis.

The committee indicated its belief in the importance of employee training programs "not only to promote more efficient current operations but to insure suitable and well-trained employees being available for advancement into more responsible positions." Such programs, it added, should be developed by railroads on an individual basis to suit their own situations and needs.

A panel discussion on various aspects of the value to railroads of standardization of materials featured the May 17 afternoon session. It was pointed out that rigid standardization can hinder progress, but that standards can be made flexible enough to permit taking advantage of relatively rapid technological advances. Standardiza-

tion, it was emphasized, does not necessarily preclude research, experimentation and change.

J. D. Loftis, assistant general superintendent motive power and mechanical engineer of the Rock Island, and a panel member, suggested that freight cars be built with a life expectancy of ten years. This, he said, would permit a railroad with 30,000 freight cars to program for 3,000 new cars a year, into which could go the latest and newest equipment. Such a car-renewal program would enable railroads to take advantage—each year, on a regular basis—of the latest findings in freight-car-equipment research.

Reports on the problems and progress of standardization of signal material were given by S. W. Freeman, sales manager, General Railway Signal Company, and J. J. Van Horn, Chicago district manager, Union Switch & Signal Division, Westinghouse Air Brake Company.

The report of the Committee on Stores Department Procedures (Chairman E. M. Pulsipher, assistant general storekeeper of the Great Northern), said that differences among railroads as to organization, location in relation to sources of supply, accounting practices and other factors, seem to preclude formulation of a single inventory-control plan applicable to all railroads.

However, the report listed several principles fundamental to any plan for effective control of inventories, among which were: Procurement, storage and distribu-

tion of all materials and supplies used by the railroads should be stores department's responsibilities; that department should also have jurisdiction over all unapplied materials, regardless of location; recognition that unfinished programs and so-called emergencies or protective stocks contribute more to slow-moving, excessive inventories than do over-stocks of regular usable items; and consideration of local purchases by line stores on blanket or standing orders, as a possible factor in reducing inventories and cost of handling material.

Alfred N. Laret, vice-president of the St. Louis-San Francisco, was elected division chairman to succeed Mr. Wilson. Carl E. Swanson, assistant general purchasing agent of the Burlington, was elected vice-chairman to succeed Mr. Laret. Elected to fill vacancies on the division's General Committee were A. W. Hix, chief purchases and stores officer, Chesapeake & Ohio; G. L. Mitchell, general purchasing agent, Atlantic Coast Line; M. C. Nystrom, assistant general purchasing agent, Southern Pacific; and C. R. Whitaker, assistant vice-president, Southern. Reelected to the General Committee were O. O. Albritton, vice-president, Illinois Central; F. J. Steinberger, assistant general purchasing agent, Santa Fe; J. S. Fair, Jr., general purchasing agent, Pennsylvania; and C. F. Bayer, manager of purchases and stores, Lackawanna.

The 1956 annual meeting of the division will be held in St. Louis, May 16-17-18.

## Railway Officers

**ATLANTIC COAST LINE.**—A.M. Cox has been appointed terminal trainmaster at Florence, S.C.

**BALTIMORE & OHIO.**—Lawrence W. Brown, district freight agent at Huntington, W. Va., has been appointed division freight agent at Cumberland, Md., succeeding G. Mel-



**BALTIMORE & OHIO.**—Francis B. Rykoskey, superintendent motive power at Pittsburgh, has been promoted to assistant general superintendent motive power and equipment at Baltimore.

ville Gemmill, who retired April 30, after 46 years of service.

E. L. Brown, assistant master mechanic, has been appointed superintendent floating equipment at New York, succeeding J. S. Major, deceased. J. A. F. Craig has been appointed master mechanic at Chicago, succeeding G. W. Short, retired.

L. W. Brenner has been appointed trainmaster at Washington, Ind., succeeding J. H. Lindsay, deceased.

Earl P. Stimson, Jr., master mechanic at Grafton, W. Va., has been appointed superintendent motive power at Pittsburgh, succeeding Francis B. Rykoskey, who has been promoted to assistant general superintendent motive power and equipment at Baltimore.

**BOSTON & MAINE.**—Clifford A. Somerville has returned to the B&M as editor-in-chief of the company magazine.

**CANADIAN PACIFIC.**—D. S. Thomson, vice-president, operation and maintenance, at Montreal, has been named vice-president, with jurisdiction over all lines. R. A. Emerson, chief engineer at Montreal, succeeds Mr. Thomson as vice-president, operation and maintenance. H. A. Greeniaus, assistant to vice-president at Montreal, has been appointed assistant vice-president there, succeeding Alexander Lyle, who retired April 30. Mr. Greeniaus was born at Toronto, July 2, 1894, and entered railroad service with the CPR in April 1911 as clerk in the office of general superintendent

at Toronto. After serving in various clerical positions, he became, successively, assistant to vice-president and general manager; general superintendent, Ontario district; assistant to vice-president, Western lines; and assistant to vice-president at Montreal, being appointed to the latter position in October 1953.



D. S. Thomson

Mr. Emerson was born at Plum Coulee, Man., April 12, 1911, and attended the University of Manitoba (B.S. in C.E., 1930) and Yale University (Stratheona Memorial Fellow in Railway Transportation). He entered railroad service with the CPR in 1928 as rodman on the Manitoba (Continued on page 38)



## New G-E axle-driven generators give the extra power, reliability for long, trouble-free

General Electric's new GMG-162 axle-driven motor generator has over twenty-five percent more reserve power than competitive equipment. Here's what that means:

1. Better battery record. There is enough power available to charge low batteries while the car is in operation. Therefore, fewer standby rechargings are required.

2. Should axle generators in other cars become inoperative, increased demand can be met effectively. In a recent test simulating emergency conditions, load requirements

of four modern air-conditioned passenger cars were supported by *one* GMG-162.

In addition, General Electric's GMG-162 has a highly simplified control system, uses only two control panels, eliminates armature reversing switch and reduces number of moving parts. It is easy to install and to maintain. For more information contact your G-E Apparatus Sales representative. General Electric Company, Locomotive and Car Equipment Department, Erie, Pa.

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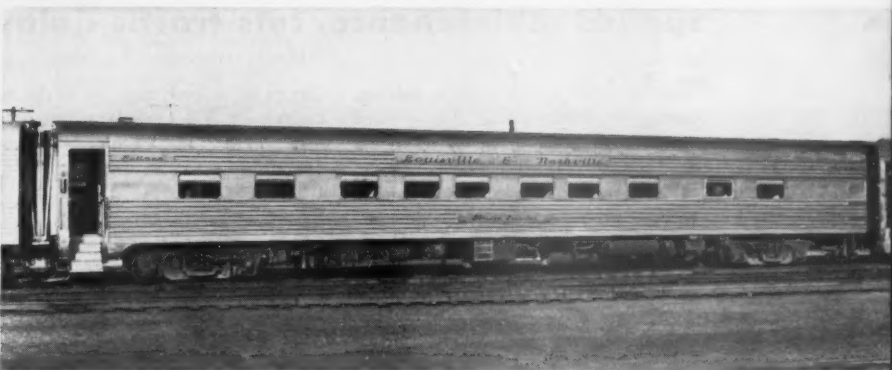
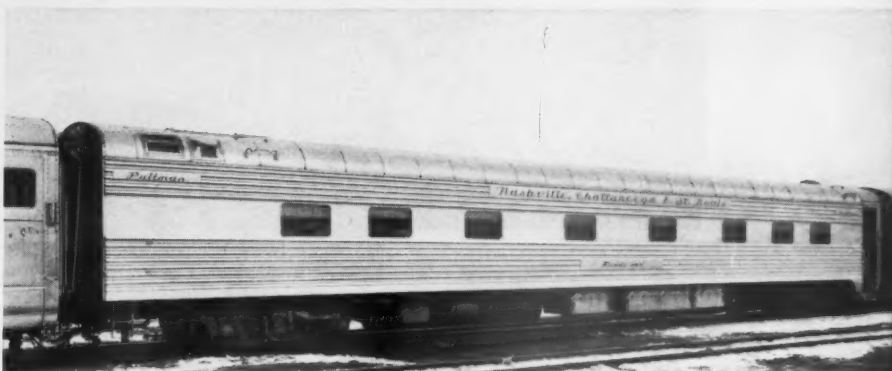
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GENERAL  ELECTRIC



## "Dixieland" operation

The first cars equipped with G.E.'s new GMG-162 were delivered to the Canadian National and Rock Island railroads in 1954. In the short time since then, orders have been received from: Atlantic Coast Line, Nashville, Chattanooga and St. Louis, Chicago and Eastern Illinois, Florida East Coast, Louisville and Nashville.





Versatile Tournatractor spreads ballast, "daylights" curves, cleans ditches, back-fills around culverts and bridge abutments, levels crossings, grades for sidings.

## "Go-anywhere" tractor speeds maintenance, cuts traffic delays

Tournatractor speeds dozing, pulling, pushing tasks anywhere. Rubber-tired mobility lets you drive on highways or the right-of-way; handle work on, off or across the tracks. You eliminate work train service, and mainline delays, because operator simply gets on and drives job-to-job at a moment's notice. This speeds service, saves time.

Because Tournatractor gets out of the way fast, it does not tie up rail traffic while cleaning drainage ditches or landslides, cutting down banks, spreading cinders, ballast, preparing grade crossings, etc. It requires no work train, no train crew, no loading and unloading delays. Operator simply drives out to the job, cleans up the

dirt to be moved, goes on to the next assignment. Your regular maintenance-of-way crew can become competent operators in a short time.

Before you buy any tractor, it will pay you to get all the facts on high-speed, rubber tired Tournatractor.

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A Subsidiary of Westinghouse Air Brake Company

Sure-footed Tournatractor safely crosses trestles and high bridges. It can travel anywhere a train can go or drive cross-country.



## Railway Officers

(Continued from page 35)

district, subsequently serving as rock ballast inspector, transitman, roadmaster, division engineer, assistant district engineer, district engineer, sys-



H. A. Greeniaus



R. A. Emerson

tem engineer of track and assistant chief engineer. Mr. Emerson was appointed chief engineer of the system in 1951.

### CENTRAL OF GEORGIA.—

Ralph E. Sease, assistant general manager, has been named general manager at Savannah, Ga. A photograph and biography of Mr. Sease were published in *Railway Age* July 26, 1954, page 40.

William H. Leavengood, assistant mechanical engineer, has been promoted to mechanical engineer at Savannah, succeeding Hubert Hawthorn, whose retirement was noted in *Railway Age* April 18. Sidney L. Waldhour, Jr., chief fire inspector, has been promoted to research and test engineer, mechanical department, at Savannah, a new position.

D. C. Horne, assistant land and tax agent, has been named land and tax commissioner, succeeding Charles B. Niehaus, whose retirement was noted in *Railway Age* April 18. Harry E. Van Horsten, assistant land and



**CANADIAN NATIONAL.**—John W. Demcoe has been appointed general superintendent of the Northern Ontario district at North Bay, Ont., as noted in *Railway Age* May 2.

tax agent, has been appointed assistant land and tax commissioner and chief fire inspector.

**CHICAGO & EASTERN ILLINOIS.**—J. H. Lamon has been appointed general agent at Dallas, Tex., succeeding H. L. Southerland, promoted.

**DULUTH, SOUTH SHORE & ATLANTIC.**—As reported in *Railway Age*, May 2, Bertel E. Pearson has been promoted to chief engineer at Marquette, Mich. Mr. Pearson joined



Bertel E. Pearson

the road in 1941 as a chainman, and was in military service from 1943 to 1946. Since returning to the DSS&A he has been instrumentman, assistant engineer, and acting supervising engineer at Marquette.

**FRISCO.**—T. F. Norvell, safety supervisor at St. Louis, has been promoted to the newly created position of general safety supervisor.

T. S. Sullivan has been appointed trainmaster, Southwestern division, at Tulsa, Okla.

**GREAT NORTHERN.**—D. L.

Manion has been appointed assistant to general manager, Lines West, at Seattle, succeeding J. D. Taylor, who has been promoted to staff assistant to vice-president, operating department, at St. Paul.

A. R. Mitchell, traveling freight agent at Winston-Salem, N.C., has been appointed general agent at Atlanta, Ga., succeeding the late A. P. Claypool.

**ILLINOIS CENTRAL.**—Bryce C. Boothby has been appointed assistant treasurer at Chicago.

**MAINE CENTRAL.**—Rate, tariff and division sections of the freight traffic department have been transferred from Boston to the office of freight traffic manager at Portland, Me. J. M. Shaw has been appointed general freight agent; G. E. Phillips, assistant general freight agent; A. E. Goodwin, chief of tariff bureau, and Armond Heerman, chief of division bureau. All four have been transferred from Boston to Portland.

Effective June 1, Harrison M. Rainie, vice-president purchases—stores, will have his headquarters at 242 St. John st., Portland 4, Me., instead of at Boston, Mass., and will devote his entire time to management of purchases and stores for the MC and the Portland Terminal.

Blair E. Walls has been appointed supervisor, employees' group insurance.

**MINNEAPOLIS & ST. LOUIS.**—Walter E. Hanson has been appointed assistant comptroller at Minneapolis. He was formerly associated with Haskins & Sells, national accounting firm.

**MISSOURI-KANSAS-TEXAS.**—J. F. O'Neill has been named general agent at Milwaukee, succeeding W. E. Lorden, who has retired after more than 34 years of service.

**MISSOURI PACIFIC.**—C. H. Hermann has been appointed general agent at Joplin, Mo., succeeding C. M. O'Beirne, deceased. R. J. Nowacki has been named foreign freight agent at Chicago, succeeding the late A. H. Aschenbrenner.

**MONON.**—Albert S. Long, Jr., general attorney, has been appointed general solicitor at Chicago.

**NEW YORK CENTRAL.**—Bernard Johnson, agent at Caribou, Me., has been appointed assistant general freight agent at Boston.

H. E. Bixler, former assistant to president of the Boston & Maine at Boston, has been appointed manager of transportation of the NYC at New York, a newly created position.

Raymond M. Ferris has been appointed assistant treasurer at New York, succeeding Frederick G. Day, who retired April 30 after 45 years' service.

R. F. Martin, city ticket agent at Chicago, has been appointed assistant

general passenger agent there, succeeding Floyd S. Trudeau, who retired March 31 (*Railway Age*, April 18).

Warren R. Grove has been appointed superintendent of building maintenance, Grand Central Terminal, New York, succeeding John J. Ponce, who retired March 31, after 46 years' service.

V. N. Klammer has been appointed office assistant to vice-president—operations and maintenance at New York, succeeding H. J. Palmer, who has been promoted to assistant to vice-president—operations and maintenance.

**NEW YORK, SUSQUEHANNA & WESTERN.**—E. P. Besell has been named secretary and W. A. Logan has become treasurer at Paterson, N.J.

E. H. P. Gilman, assistant general manager, has been appointed assistant



E. H. P. Gilman

to president. The title of assistant general manager has been abolished.

Thomas R. Murphy, trainmaster at Paterson, has been appointed superintendent, a newly created position. Herman H. Kiel, assistant trainmas-



**UNION PACIFIC.**—W. Grant Burden has been named director of public relations in a newly opened office at New York. Mr. Burden was formerly assistant to general director of public relations at Omaha.


**CARPENTER**

ALL KINDS OF EMERGENCY COLORED AND WARNING LIGHTS FOR CARS

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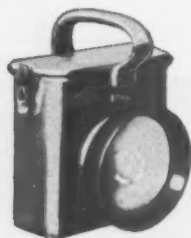


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Double filament bulb for work light or mile range searchlight. (Type S-6, same with rechargeable battery. Type FF-5, same as F-5, with flashing red warning light at rear of handle.) Finest light for emergency repair crews, yard work, and many other uses.

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Gives a 10 ft. spot of even light for pole work, or adequate work light on the ground. Range 1/3 mile. Sturdy, rustproof steel case, heavily enameled. Focusing knob. Provides railway telephone, telegraph and signal repair crews with the same light used by telephone company repair crews.



#### Type J-24, Battle Lantern

Time-tested and trusty 2-cell sturdy cast aluminum lantern, standard for years for railroad motor car head-lights and emergencies. Instant battery replacement, no screws. Waterproof. Focusing screw. Hanging bracket available.

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"Master Light Makers for Almost a Half-Century"

ter, succeeds Mr. Murphy as trainmaster.

**NICKEL PLATE.**—D. W. Sanzenbacher, division freight agent at Toledo, has retired after 56 years of service.

**NORFOLK SOUTHERN.**—As reported in *Railway Age* April 25, Frank J. Tally has been promoted to assistant executive vice-president;



Frank J. Tally



Melvin B. Dowdy



Robert F. Haley

Melvin B. Dowdy has been named superintendent motive power and equipment and Robert F. Haley has been

appointed director of personnel, all at Norfolk, Va.

**L. P. Kennedy, Jr.**, has been appointed diesel supervisor at Raleigh, N.C.

**Robert Lathan** has been elected assistant secretary at Norfolk.

**PACIFIC CAR DEMURRAGE BUREAU.**—N. H. Schammel, assistant manager, has been appointed manager at San Francisco, succeeding A. A. DeAyala, who retired April 30, after more than 41 years with the bureau.

**PENNSYLVANIA.**—This road has established a section of industrial hygiene in its medical department. **James F. Morgan**, formerly head chemical hygienist of the Industrial Hygiene Foundation of America, Inc., at Mellon Institute, Pittsburgh, will head the new section, first of its kind to be established by an American railroad.

**Joseph N. Peirsol**, freight representative at Harrisburg, Pa., has been appointed district freight agent at Easton, Pa., succeeding the late I. L. Bell.

**James W. Hagerty**, assistant purchasing agent at Philadelphia, has retired after 54 years of service. **L. S. Atkinson**, assistant purchasing agent, will assume Mr. Hagerty's duties. **F. A. Zimmerman**, agent in the purchasing department, has been promoted to assistant purchasing agent.

**SOUTHERN PACIFIC.**—**Otto J. Hermann, Jr.**, has been appointed methods research assistant at San Francisco, a newly created position designed further to streamline operating functions in the SP's freight and passenger traffic departments. Mr. Hermann has been special representative of the SP working as a member of a cooperative "Operations Research" team at Stanford Research Institute, of which the SP is an associate member.

**TOLEDO TERMINAL.**—**F. T. Schoedel**, general yardmaster on the New York Central, has been appointed trainmaster of the TT, succeeding **A. C. Dewey**, who has resigned from that post to return to other duties with the company.

**WABASH.**—**M. A. Carroll** has been named traffic manager at Phoenix, Ariz.

#### OBITUARY

**Walter B. Calloway**, 81, who retired in December 1943 as general passenger traffic manager of the **Baltimore & Ohio** at Baltimore, died May 13 at a rest home in that city.

**Charles D. Young**, 76, who retired in 1948 as vice-president in charge of purchases, stores and insurance of the **Pennsylvania** at Philadelphia, died May 13 at his home in that city. Mr. Young was chairman of the Purchases & Stores Division, Association of American Railroads, 1925-1926.



(Dollar figures are stated in thousands; i.e., with last three digits omitted)

(Dollar figures are stated in thousands; i.e., with last three digits omitted)

MONTH OF MARCH AND THREE MONTHS OF CALENDAR YEAR 1955

\*Because of a strike, figures for the AAWP, WoA/Ab and Clinchfield are not available.

\*Because of a strike, figures for the AAWP, WoA/Ab and Clinchfield are not available.

# 2

## WAYS TO PUT

## A CUSHION BETWEEN

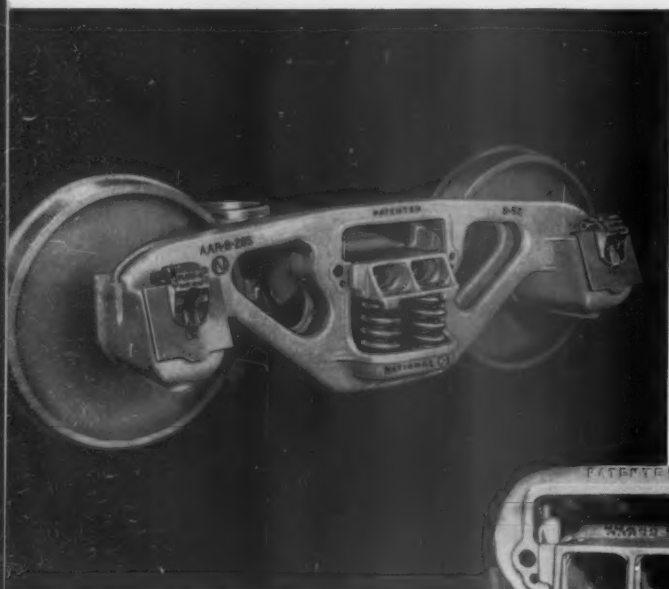
### NATIONAL

### C-1 TRUCKS *for new cars*

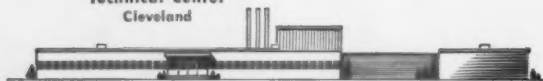
You get constant, over-the-years protection for roadbed, rolling stock and lading with National C-1 trucks. That's because C-1 trucks have an efficient constant-friction-control mechanism that cushions lading against vertical and lateral shocks.

And, equally important, C-1 trucks are recognized for their long service life. Hardened spring-steel wear plates, low-stressed wedge springs, and hardened friction wedges are designed and built to last the life of the car. Specify National C-1 trucks for all new cars and get three-way protection—at low maintenance cost.

Heart of a smooth-riding car is its friction-control mechanism. Proof of the C-1 truck's long life is evident from a recent inspection of cars after 200,000 miles of service. Full details in Circular 5456 "Facts About the C-1" available on request.

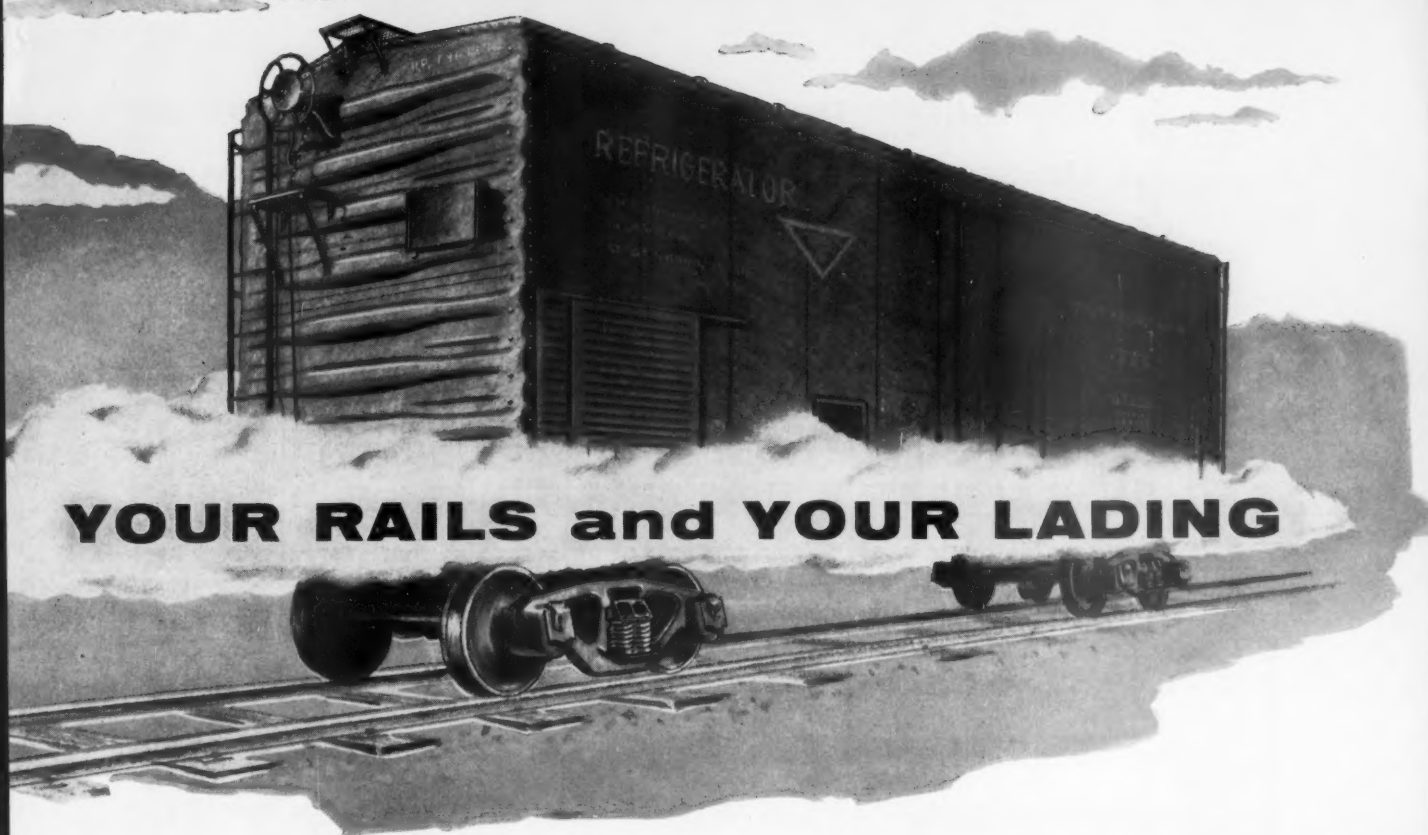


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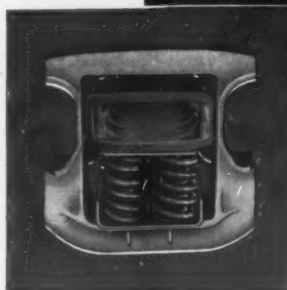
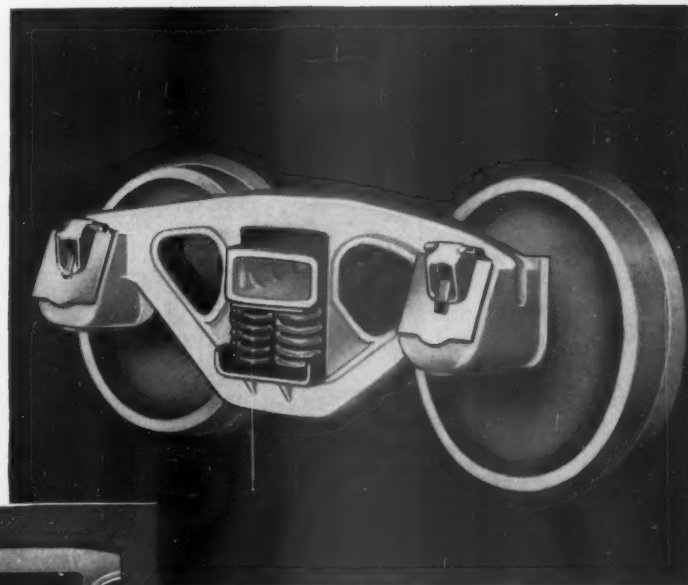


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Now even your non-friction-control trucks can have superior riding qualities that mean less wear and tear on track and equipment, more protection for lading. Upgrade your cars with National Snubber Packages. This will provide a softer and smoother ride because they're built on the identical friction-control principle as the National C-1 truck.

National Snubber Packages fit most non-friction-control trucks in service today. And they're assembled and installed same as a cluster of load springs. Upgrade with National Snubber Packages and keep damage and maintenance at a new low.

**NATIONAL SNUBBER PACKAGES** can be supplied either with or without load springs. Since they use AAR Alternate Standard 2½ inch or 1936 AAR Standard 1½ inch deflection springs, there are no problems of stocking "special" springs. Circular 5054 "National Snubber Package" available on request.



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MONTH OF MARCH AND THREE MONTHS OF CALENDAR YEAR 1955

MONTH OF MARCH AND THREE MONTHS OF CALENDAR YEAR 1955

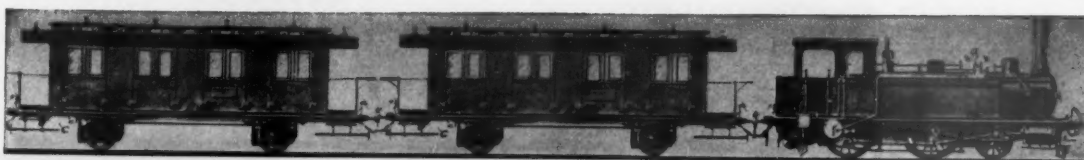
MONTH OF MARCH AND THREE MONTHS OF CALENDAR YEAR 1955

Average miles operated during period	Name of Road	Operating Revenues				Maint. Way and Structures				Operating Expenses				Net from railway operation				Railway tax accruals				Net railway income			
		Freight		Pass.		Total		Total		Total		Total		Total		Total		Total		Total		Total		Total	
		1955	1954	1955	1954	1955	1954	1955	1954	1955	1954	1955	1954	1955	1954	1955	1954	1955	1954	1955	1954	1955	1954	1955	
753	Louisiana & Arkansas.....	2,217	48	2,359	2,255	232	325	19	280	290	91	73	613	1,277	1,369	54.2	60.7	1,081	478	514	457	1,302	1,495	1,320	
3 mo.	Louisiana & Arkansas.....	6,275	149	6,667	6,549	651	916	61	778	839	272	215	1,774	3,557	4,007	87.6	61.2	3,039	1,302	1,495	1,320	3,563	4,007	2,038	
4,733	Louisville & Nashville.....	8,695	329	9,697	17,502	1,604	3,122	261	2,392	4,086	875	346	3,385	8,412	14,337	84.0	81.9	1,255	5,740	7,127	6,366	10,311	17,502	10,311	
4,733	Louisville & Nashville.....	8,695	329	9,697	17,502	1,604	3,122	261	2,392	4,086	875	346	3,385	8,412	14,337	84.0	81.9	1,255	5,740	7,127	6,366	10,311	17,502	10,311	
3 mo.	Louisville & Nashville.....	27,317	42,419	5,778	8,621	732	8,621	732	8,621	11,386	2,500	1,052	14,646	32,108	41,203	79.2	80.7	1,311	3,039	3,563	2,038	4,007	7,127	6,366	
4,733	Maine Central.....	2,387	2,560	3,115	4,130	27	326	421	574	1,502	234	61	2,288	1,653	1,764	69.2	68.4	735	507	737	505	1,031	1,311	1,031	
3 mo.	Maine Central.....	7,161	7,780	9,345	12,390	82	978	1,263	1,782	4,506	702	183	7,065	5,039	5,292	74.3	74.9	2,203	1,514	1,812	1,217	2,463	3,039	2,463	
344	Midland Valley.....	199	.....	202	193	42	45	5	11	10	4	4	51	118	122	58.6	63.0	84	43	24	11	43	24	11	
3 mo.	Midland Valley.....	595	.....	606	579	126	135	15	33	30	11	14	154	352	350	69.7	68.2	153	86	26	30	86	26	30	
1,397	Minneapolis & St. Louis.....	1,590	3	1,660	1,936	275	266	27	279	275	76	100	569	1,339	1,353	80.7	69.9	321	187	128	248	321	187	128	
3 mo.	Minneapolis & St. Louis.....	4,770	9	4,980	5,808	825	798	82	819	800	229	306	1,696	3,946	3,981	81.4	80.3	901	567	340	413	901	567	340	
3,224	Minn., St. Paul & St. Ste. Marie.....	4,522	44	4,946	4,953	577	558	82	819	800	229	306	1,696	3,946	3,981	81.4	80.3	901	567	340	413	901	567	340	
3 mo.	Minn., St. Paul & St. Ste. Marie.....	13,566	133	14,538	14,551	1,734	1,677	158	1,734	1,983	358	243	3,392	7,372	7,439	93.1	104.5	550	606	406	488	550	606	406	
148	Mississippi Central.....	217	.....	222	228	57	66	3	27	28	6	15	49	157	172	70.5	75.4	65	23	29	27	65	23	29	
3 mo.	Mississippi Central.....	651	.....	666	684	163	188	8	80	80	17	44	155	475	499	76.8	79.2	143	49	6	7	143	49	6	
172	Missouri Illinois.....	496	.....	498	495	61	78	7	72	81	28	11	119	275	311	55.2	62.7	223	70	158	83	223	70	158	
3 mo.	Missouri Illinois.....	1,357	.....	1,358	1,357	167	178	11	211	253	85	35	347	793	867	59.6	71.4	537	207	350	159	537	207	350	
3,241	Missouri-Kansas-Texas Lines.....	5,382	717	5,722	7,505	1,591	1,677	158	1,734	1,983	358	243	3,392	7,372	7,439	93.1	104.5	550	606	406	488	550	606	406	
3 mo.	Missouri-Kansas-Texas Lines.....	15,382	2,125	16,161	2,425	2,759	2,895	270	2,895	2,810	732	737	6,847	13,545	14,338	76.9	79.2	4,080	1,333	1,584	1,424	4,080	1,333	1,584	
6,919	Missouri Pacific.....	16,331	691	19,034	18,750	2,967	3,286	270	3,673	3,450	802	476	6,573	14,381	14,808	75.6	79.0	4,652	1,100	2,850	2,074	4,652	1,100	2,850	
3 mo.	Missouri Pacific.....	49,679	2,199	57,993	52,865	7,459	9,081	849	10,447	9,941	2,385	1,422	18,938	40,217	42,932	77.6	81.1	11,576	3,240	6,371	4,498	11,576	3,240	6,371	
1,104	International-Great Northern.....	2,461	120	2,823	2,822	521	550	35	477	470	122	63	1,095	2,281	2,411	80.8	85.4	119	332	243	245	119	332	243	
3 mo.	International-Great Northern.....	7,383	369	8,469	8,468	1,563	1,650	107	1,911	1,825	367	185	3,147	6,813	7,232	83.9	87.0	1,896	519	308	280	1,896	519	308	
1,723	Gulf Coast Lines.....	3,251	383	3,582	3,709	1,500	1,453	123	1,529	1,425	343	283	3,375	6,563	6,762	73.3	73.2	2,741	462	1,615	1,425	2,741	462	1,615	
3 mo.	Gulf Coast Lines.....	9,409	252	10,281	10,635	1,955	2,068	137	1,487	1,560	343	283	3,375	7,540	7,793	73.3	73.2	2,741	462	1,615	1,425	2,741	462	1,615	
177	Monongahela.....	534	.....	537	450	64	64	16	57	56	14	1	211	357	296	66.4	65.8	180	27	19	1	180	27	19	
3 mo.	Monongahela.....	1,602	.....	1,611	1,350	184	183	47	166	171	41	2	525	914	890	65.0	65.5	491	80	52	36	491	80	52	
51	Montour.....	105	.....	108	139	15	16	2	42	64	17	1	51	118	144	109.1	103.6	—	...	30	44	—	...	30	
3 mo.	Montour.....	315	.....	324	417	45	48	5	126	192	51	10	150	354	432	112.3	107.8	86	137	57	43	86	137	57	
1,043	Nashville, Chatt. & St. Louis.....	1,547	45	1,808	3,434	269	511	45	353	441	130	108	650	1,504	2,361	83.2	69.8	1,641	575	798	1,202	1,641	575	798	
3 mo.	Nashville, Chatt. & St. Louis.....	4,636	135	5,424	10,299	807	1,523	135	1,156	1,235	416	347	2,826	5,840	6,760	78.1	72.8	1,641	575	798	1,202	1,641	575	798	
10,710	New York Central.....	46,659	7,863	63,577	62,352	7,001	8,097	1,026	10,691	12,380	2,239	1,077	26,620	49,001	52,061	77.1	83.5	14,576	5,106	7,040	3,933	14,576	5,106	7,040	
3 mo.	New York Central.....	139,376	24,398	197,110	177,484	18,360	22,300	2,911	29,690	37,988	6,828	3,191	78,464	140,011	154,437	78.7	83.8	37,899	14,976	20,425	4,071	37,899	14,976	20,425	
3 mo.	Pittsburgh & Lake Erie.....	3,501	209	3,501	3,077	402	472	311	819	1,094	285	131	1,162	2,296	2,676	76.2	94.5	810	339	208	219	810	339	208	
221	Pittsburgh & Lake Erie.....	3,501	209	3,501	3,077	402	472	311	819	1,094	285	131	1,162	2,296	2,676	76.2	94.5	810	339	208	219	810	339	208	
3 mo.	Pittsburgh & Lake Erie.....	10,503	628	10,503	9,231	1,164	1,385	863	2,057	2,397	603	293	3,594	6,902	7,594	73.6	73.6	1,519	562	737	537	1,519	562	737	
2,179	New York, Chicago & St. Louis.....	3,471	406	36,126	34,573	4,008	3,979	416	6,174	5,895	1,053	993	13,080	25,613	24,940	70.9	72.0	10,512	4,950	4,334	3,927	10,512	4,950	4,334	
3 mo.	New York, Chicago & St. Louis.....	10,413	1,218	108,378	102,719	12,224	11,988	1,218	17,520	16,785	3,159	1,218	31,240	63,839	62,820	72.8	72.8	10,512	4,950	4,334	3,927	10,512	4,950	4,334	
1,769	New York, New Haven & Hartford.....	7,222	3,809	13,114	12,995	1,550	2,032	264	1,907	2,011	379	261	5,772	10,440	10,764	79.6	82.8	2,673	484	1,297	322	2,673	484	1,297	
3 mo.	New York, New Haven & Hartford.....	20,890	11,467	36,649	36,594	4,377	5,021	793	5,405	5,729	998	707	16,800	29,783	30,433	81.3	82.3	6,867	1,016	2,590	844	6,867	1,016	2,590	
1,261	New York Connecting.....	1,997	.....	1,997	1,997	236	216	75	233	42	.....	.....	280	604	498	51.4	53.8	571	240	263	180	571	240	263	
3 mo.	New York Connecting.....	5,991	.....	5,991	5,991	708	648	225	700	126	.....	.....	840	1,812	1,494	51.4	53.8	1,713	720	789	540	1,713	720	789	
541	New York, Ontario & Western.....	499	.....	507	501	104	118	17	90	89	62	74	255	503	529	94.3	105.5	521	312	109	130	521	312	109	
3 mo.	New York, Ontario & Western.....	1,497	.....	1,521	1,503	303	338	51	268	282	182	24	752	1,488	1,542	108.8	105.2	471	240	263	180	471	240	263	
120	New York, Susquehanna & Western.....	476	47	548	501	54	56	5	62	75	13	9	224	384	407	70.0	81.3	164	56	53	—	164	56	53	
3 mo.	New York, Susquehanna & Western.....	1,428	14	1,644	1,503	160	158	16	182	201	68	32	437	710	744	69.8	81.5	476	153	159	—	476	153	159	
2,133	Norfolk & Western.....	15,750	239	17,501	17,501	2,367	2,367	311	3,201	3,201	686	32	1,034	1,119	1,119	69.8	81.5	476	153	159	—	476	153	159	
3 mo.	Norfolk & Western.....	42,052	750	44,915	39,567	6,588	6,722	931	9,692	9,768	2,059	1,004	13,994	33,145	33,145	73.7	83.8	4,820	2,835	2,410	3,462	4,820	2,835	2,410	
605	Norfolk Southern.....	927	.....	940	909	187	188	13	139	125	28	146	268	696	686	74.0	75.5	544	263	189	82	544	263	189	
3 mo.	Norfolk Southern.....	2,827	.....	2,827	2,827	331	331	39	371	329	84	142	737	1,921	1,927	77.9	79.3	2,444	1,069	669	161	2,444	1,069	669	
6,866	Northern Pacific.....	13,065	565	14,681	13,887	1,740	2,123	267	2,775	2,949	521	338	5,880	11,591	11,860	79.0	85.4	3,090	1,448	1,864	1,197	3,090	1,448	1,864	
3 mo.	Northern Pacific.....	39,193	1,695	43,051	41,663	4,955	5,374	746	7,114	8,025	1,356	995	17,335	33,855	34,552	83.0	87.8	6,422	4,102	3,151	1,792	6,422	4,102	3,151	
3 mo.	Northwestern Pacific.....	3,273	.....	3,273	3,273	355	355	44	444	444	102	51	580	1,111	1,111	77.8									

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